



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 139276

TO: Jeffrey Parkin
Location: rem/3d39/3c18
Art Unit: 1648
Friday, December 03, 2004

Case Serial Number: 10/031975

From: Toby Port
Location: Biotech-Chem Library
REM-1A59
Phone: 571-272-2523

toby.port@uspto.gov

Search Notes

Examiner Parkin,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Toby Port

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From: Parkin, Jeffrey
Sent: Wednesday, December 01, 2004 5:22 PM
To: STIC-Biotech/ChemLib
Subject: Sequence Search for U.S. Serial No. 10/031,975

Would you please search the following SEQ ID NOS.: vis-à-vis the aforementioned application: 1, 2, 12, 23, and 24.

- Specifically, I am interested in the following amino acids: 176-221, 179-218, and 179-214.

Can you perform a search on just these fragments? I am not particularly interested in the full-length sequences, since these are already known and publicly available.

Place results on both PAPER and DISK.

Any questions or suggestions on search strategies please call.

JSP

AU 1648
REM 3D39
2-0908

STIC
620-2 2005
12-01-04

http://expoweb1:8001/cgi-bin/expo/GenInfo/snquery.pl?APPL_ID=10031975

STAFF USE ONLY

Searcher: _____
Searcher Phone: 2-_____
Date Searcher Picked up: _____
Date Completed: _____
Searcher Prep/Rev. Time: _____
Online Time: _____

Type of Search

NA Sequence: # _____
AA Sequence :# _____
Structure: # _____
Bibliographic: _____
Litigation: _____
Patent Family: _____
Other: _____

Vendors and cost where applicable

STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____

THIS PAGE ON FILE (1887)

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221
Perfect score: 244
Sequence: 1 SNQNNFVHDCVNTTKQHTV.....ENFTETDVKMERVVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	117	5	ABG94357 Modified
2	244	100.0	117	5	ABG80669 Human pr1
3	244	100.0	117	7	ADD24196 Modified
4	244	100.0	142	2	AAW17686 P10n pro
5	244	100.0	163	7	ADB63859 Human pro
6	244	100.0	200	5	ABG31907 Human pr1
7	244	100.0	208	3	ABAB07318 Human pr1
8	244	100.0	208	3	ABAB07329 Human pr1
9	244	100.0	208	5	ABG31902 Human pr1
10	244	100.0	245	4	AAW72342 Monkey pr
11	244	100.0	245	4	AAW72352 Cercopit
12	244	100.0	253	2	AAW6715 Human pr1
13	244	100.0	253	2	AAW69660 Human pr1
14	244	100.0	253	2	AAW85901 Human pr1
15	244	100.0	253	2	AAW07994 Human pr1
16	244	100.0	253	3	AAW81485 Human pr1
17	244	100.0	253	3	AAW06272 Human pr1
18	244	100.0	253	3	AAW15035 Human pr1
19	244	100.0	253	4	AAW72347 P10n pro
20	244	100.0	253	4	AAW72353 Ghesera p
21	244	100.0	253	4	AAW72344 Rhesus mo
22	244	100.0	253	4	AAW72351 Hamadryas
23	244	100.0	253	4	AAW72348 P10n pro
24	244	100.0	253	4	AAW72346 P10n pro
25	244	100.0	253	4	AAW72355 P10n pro

25	244	100.0	253	4	AAW72349 P10n pro
27	244	100.0	253	4	AAW72340 Orangutan
28	244	100.0	253	4	AAW72338 Human pr1
29	244	100.0	253	4	AAW72354 Capuchin
30	244	100.0	253	4	AAW72341 Gorilla p
31	244	100.0	253	4	AAW61770 Human pr1
32	244	100.0	253	4	AAW82112 Human pr1
33	244	100.0	253	4	AAW65853 Human pr1
34	244	100.0	253	5	ABP51787 Human pr1
35	244	100.0	253	5	ABG31901 Human pr1
36	244	100.0	253	5	ABW04426 Human pr1
37	244	100.0	253	5	AAW15603 Human pr1
38	244	100.0	253	5	AAW78009 Amino ac1
39	244	100.0	253	5	ABW7181 Prostate
40	244	100.0	253	6	ABW58868 Human pr1
41	244	100.0	253	6	AAW33227 Human pr1
42	244	100.0	253	6	ABW42800 Human pr1
43	244	100.0	253	6	ABW42789 Human pr1
44	244	100.0	253	6	ABW42790 Gorilla p
45	244	100.0	253	7	ADD24186 Human pr1

ALIGNMENTS

RESULT 1
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326898P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisoc A, Maurer P, Lechner F, Sebbel P;
PI Ploeseck C;
XX
PT WPI; 2002-627351/67.
XX
DR Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
PS Disclosure; Page 441; 441p; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organism comprising
XX at least one first attachment site, where the organism is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

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Query Match      Query Match      Query Match
Best Local Similarity 100.0%; Score 244; DB 5; Length 117,
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 SNONPFHDCNNTTTRKOTVTTTKGNETFEDVKMERVEYQMKI 46
Db      49 SNOINFHDCNNTTTRKOTVTTTKGNETFEDVKMERVEYQMKI 94
```

29-NOV-2002 (first entry)

WO200256907-A2

04-MAY-2001; 2001US-0262379P.
05-OCT-2001; 2001US-0288544P.

NOVARTIS PHARMACEUTICALS LTD. CYTOS BIOTECHNOLOGY AG

LUEO/) LUEOEND R.
STAU/) STAUFFENRIET "

Rechner F., Ortman J.

molecular scaffold relates to a composition comprising: (a) a non-natural core particle of a non-natural origin; (1) a core particle selected from: (1) a site, and (11) an organism comprising at least one first attachment site, where the organism is connected to the core particle by at least one covalent bond; (b) an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is attached to the core particle by at least one covalent bond; (c) an antigen or antigenic determinant with at least one attachment site is selected from: (i) an attachment site not naturally occurring with the antigen or antigenic determinant, and where the second attachment site naturally occurring with the antigen or antigenic determinant is determined, where the second attachment site not naturally occurring with the antigen or antigenic determinant is capable of being attached to the antigen or antigenic determinant, and (ii) an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of being attached to the antigen or antigenic determinant.

versus host disease, as a vaccine for diseases occurring
respiratory distress, IGE-mediated allergic reactions, anaphylaxis, graft
acute lymphoblastic syndrome (ARDS)

Query Match
Best Local Similarity

49 SNQNNFVHDCNITTKQVWZT 46

ADD24196 standard; protei-

13-VAN-2004 (first entry)

first attachment site; antigen; core particle; PRP; PRP peptide; virus-like particle.

synthetic.
prion.

ZH-00000000

PD 24-JUL-2003;
 PF 17-JAN-2003; 2003WO-EP000460.
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PI Bechmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 244; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 46
 DB 49 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 94
 RESULT 4
 AAW17686
 ID AAW17686 standard; peptide; 142 AA.
 AC AAW17686;
 XX
 DT 14-JAN-1998 (first entry)
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 OS
 PN WO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96WO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX

PI Prusiner SB, Kaneko K, Cohen FE;
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS Claim 11; Page 7-38; 50pp; English.
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 XX
 SQ Sequence 142 AA;
 Query Match 100.0%; Score 244; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 6.7e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 46
 DB 81 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 126
 RESULT 5
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumor.
 XX
 OS Homo sapiens.
 OS
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX
 PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS Claim 1; Page; 222pp; English.
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel

CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or peptide
 CC with the antibody of the polynucleotide by contacting the polypeptide or peptide
 CC between the two, a transformant carrying the polynucleotide or peptide
 CC in a useful manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC transfection. Membrane proteins, signal transduction-related proteins,
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumors. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the encoded protein to treat diseases. The
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

XX Sequence 163 AA;

Query Match Best Local Similarity 100.0%; Score 244; DB 7; Length 163;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVEQWCI 46
 Db 80 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVEQWCI 125

RESULT 6

ABG31907
 ID ABG31907 standard; protein; 200 AA.

AC ABG31907;

DT 05-NOV-2002 (first entry)

XX Human prion protein related peptide #6.

XX Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.

PS Example 2; Page 63-64; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)

CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

XX Sequence 200 AA;

Query Match Best Local Similarity 100.0%; Score 244; DB 5; Length 200;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVEQWCI 46
 Db 140 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVEQWCI 185

RESULT 7

AAB07318
 ID AAB07318 standard; protein; 208 AA.

AC AAB07318;

DT 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;
 XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Homo sapiens.

XX Key Location/Qualifiers
 XX 29..69

FT Region /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)".

FT Disulfide-bond 157..192

FT Modified-site 208

FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"

XX MO200029850-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99WO-FI000897.

PR 17-NOV-1998; 98FI-00002481.

PA (WALL-) WALLAC OY.

PA (BBSR-) BBSRC OFFICE.

PI Hope J, Barnard GJR, Birkett CR;

DR WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of transmissible
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
 CC and Gerstmann-Strausler-Sheinker syndrome (BSE), scrapie, Creutzfeldt-Jacob
 CC disease (CJD), and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the process resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;
SQ

Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 46
DB 148 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 193

RESULT 8
AAB07329

ID AAB07329 standard; protein; 208 AA.

XX AAB07329;

DT 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Region

FT /note="Repeat region consisting of tandem repeats of

FT Disulfide-bond 157..192

FT Modified-site 208

FT /note="C-terminal phospho-inositol glycolipid membrane

FT anchor (-GPI)"

XX WO200029849-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99WO-FI000896.

XX 17-NOV-1998; 98FI-00002480.

XX (WALL-) WALLAC OY.

XX (BBSR-) BBSR OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-399778/34.

XX New immunoassay for prion protein, used for determination of

XX transmissible spongiform encephalopathies in mammals, comprises specific

XX capture antibody.

XX Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of transmissible

XX spongiform encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an assay

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 46
DB 148 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 193

RESULT 9
ABG31902

ID ABG31902 standard; protein; 208 AA.

XX ABG31902;

DT 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;

KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Homo sapiens.

XX WO200261418-A1.

XX 31-JAN-2002; 2002WO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

XX Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal

XX prion protein sedimentation in non-human follicular dendritic cells as

XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-

XX human prion disease infection factor in a sample by using abnormal prion

XX protein sedimentation in non-human follicular dendritic cells (FDC) as

XX indication. The method of the invention is useful for screening (non-)

XX human prion disease infection factor, which is applicable in safety tests

XX on drugs like blood preparations, foods and cosmetics, and for developing

XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob

XX disease (CJD). The method of the invention is simple and quick. The

XX present sequence represents a human prion related protein of the

XX invention

XX Sequence 208 AA;

QY Query Match 100.0%; Score 244; DB 5; Length 208;

DB Best Local Similarity 100.0%; Pred. No. 1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 46

DB 148 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC 193

RESULT 10
AAB72342
ID AAB72342 standard; peptide; 245 AA.
XX AAB72342;
XX 06-AUG-2003 (revised)
DT 17-MAY-2001 (first entry)
XX

DE Monkey prion protein cellular form (PrPc) amino acid sequence.
 XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; monkey;
 KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 OS Primatee.
 XX
 FH Key
 FT Region
 FT 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 PN WO200107479-A2.
 PD 01-FEB-2001.
 PF 25-JUL-2000; 2000MO-GB002873.
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Collinge J, Clarke AR, Maitlo JP, Jackson GS, Hosszu LLP;
 DR WPI; 2001-168538/17.
 XX
 PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 XX cows and Creutzfeldt-Jakob disease in humans.
 PS Claim 3; Fig 5; 6pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease.
 CC e.g. spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC monkey prion protein. The present sequence represents the cellular form of
 CC production of anti-PrPc antibodies. (Updated on 06-AUG-2003 to correct OS
 CC field.)
 CC
 CC Sequence 245 AA;
 SQ
 Query Match 100.0%; Score 244; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQNCI 46
 Db 162 SNONNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQNCI 207
 AAR86715;
 AAR72352;
 AAB72352 standard; peptide; 245 AA.
 ID AAB72352
 XX
 AC AAB72352;
 XX
 DT 17-MAY-2001 (first entry)
 XX
 DE Cercopithecus prion protein cellular form (PrPc) amino acid sequence.
 XX
 KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; cercopithecus;
 KM bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 XX
 OS Cercopithecus sp.

XX
 FH Key
 FT Region
 FT 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 PN WO200107479-A2.
 PD 01-FEB-2001.
 PF 25-JUL-2000; 2000MO-GB002873.
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Collinge J, Clarke AR, Maitlo JP, Jackson GS, Hosszu LLP;
 DR WPI; 2001-168538/17.
 XX
 PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 XX cows and Creutzfeldt-Jakob disease in humans.
 PS Claim 3; Fig 5; 6pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease.
 CC e.g. spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC cercopithecus prion protein. The present sequence represents the cellular form of
 CC in the production of anti-PrPc antibodies
 CC
 CC Sequence 245 AA;
 SQ
 Query Match 100.0%; Score 244; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQNCI 46
 Db 162 SNONNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQNCI 207
 AAR86715;
 AAR86715 standard; protein; 253 AA.
 ID AAR86715
 XX
 AC AAR86715;
 XX
 DT 15-OCT-1996 (first entry)
 XX
 DE Human prion protein, HuPrP.
 XX
 KM Chimeric gene; chimeric prion; transgenic animal; diagnosis;
 KM spongiform encephalopathy; PrP; central nervous system; CNS;
 KM Creutzfeldt-Jakob disease; CJD; BSE.
 XX
 OS Homo sapiens.
 XX
 PN WO9531466-A1.
 PN 23-NOV-1995.
 PD 23-NOV-1995.
 PF 10-APR-1995; 95MO-US0004426.
 XX
 PR 13-MAY-1994; 94US-00242188.

XX (REGC) UNIV CALIFORNIA.
 XX Prusiner SB, Scott MR, Telling G;
 XX WPI, 1996-010868/01.
 XX
 XX Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.
 XX
 PS Disclosure; Page 41-42; 65pp; English.
 XX
 XX Pathogenic prions in a sample can be detected by infecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. human) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding human PrP
 CC sequence. The chimeric PrP, designated Mhu2MPR, differs from the MoPrP
 CC by 9 AA between residues 96 and 167
 XX
 SO Sequence 253 AA;
 XX
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 215
 XX
 RESULT 13
 AAW69660 standard; protein; 253 AA.
 XX
 AC AAW69660;
 XX
 DT 25-MAR-2003 (revised)
 DT 19-OCT-1998 (first entry)
 XX
 DE Human prion protein HuPrP.
 XX
 XX Human; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease.
 XX
 OS Homo sapiens.
 XX
 PN US5792901-A.
 XX
 PD 11-AUG-1998.
 XX
 PE 30-JUL-1996; 96US-00692892.
 XX
 PR 13-MAY-1994; 94US-00242188.
 PR 31-JUL-1995; 95US-00509261.
 PR 31-AUG-1995; 95US-00521392.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Scott MR, Telling GC, Prusiner SB;
 XX
 XX WPI, 1998-456207/39.
 DR
 XX Transgenic mouse with altered PrP gene - for detecting disease-causing
 PT prions.
 XX
 PS Example 8; Fig 3; 37pp; English.
 XX
 CC A transgenic mouse has been developed which comprises a genome in which
 CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
 CC ablated, the genome containing operatively inserted all exogenous non-

CC mouse PrP gene. The mouse is susceptible to infection with prions which
 CC generally only infect a genetically diverse mammal due to the presence of
 CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
 CC symptoms of prion disease within 200 days or less after inoculation with
 CC prions which generally only infect a genetically diverse mammal. Also
 CC described in the present invention are: (A) a method of producing the
 CC transgenic mouse; and (B) determining the presence of infectious prions
 CC in a sample obtained from a bovine. The transgenic mouse is used to
 CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
 CC disease of humans caused by prions. The present sequence represents human
 CC prion protein (HuPrP), used in an example from the present invention.
 CC (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SO Sequence 253 AA;
 XX
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 215
 XX
 RESULT 14
 AAW85901
 ID AAW85901 standard; peptide; 253 AA.
 XX
 AC AAW85901;
 XX
 DT 12-FEB-1999 (first entry)
 XX
 DE Human prion protein (PrP) sequence.
 XX
 XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
 KM Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
 KM cosmetic; therapeutic; human.
 XX
 OS Homo sapiens.
 XX
 PN US5846533-A.
 XX
 PD 08-DEC-1998.
 XX
 PE 13-SEP-1996; 96US-00713939.
 XX
 PR 14-SEP-1995; 95US-00528104.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI (SCRI) SCRIPPS RES INST.
 XX
 XX Prusiner SB, Williamson RA, Burton DR;
 XX
 XX WPI, 1999-058996/05.
 DR
 XX Antibody specific for scrapie isoform of prion protein - useful for
 PT diagnosis and therapy.
 XX
 PS Disclosure; Col 41-42; 58pp; English.
 XX
 CC This represents a human prion protein (PrP) sequence. The invention
 CC relates to an antibody that is capable of binding to native PrP(Sc), the
 CC scrapie isoform of PrP. The antibody is produced by a method that
 CC comprises synthesizing a library of antibodies on phages, contacting the
 CC phages with a composition containing PrP proteins, isolating phages that
 CC bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
 CC and optionally analysing the phages to determine a nucleic acid sequence
 CC encoding an amino acid sequence to which the native PrP(Sc) binds. The
 CC antibody is used to detect disease-associated PrP, especially in
 CC Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
 CC can also be used to neutralise the infectivity of PrP(Sc). Assays using
 CC the antibodies can be used to screen for disease-associated PrP in
 CC pharmaceutical products, foods and cosmetics or for therapeutic purposes

XX Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC 46
DB 170 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC 215

RESULT 15

AA07994
ID AA07994 standard; protein; 253 AA.
XX
AC AA07994;

DT 08-JUL-1999 (first entry)
XX
DE Human prion protein.

KM Prion protein; PrP, human; polyclonal antiserum; immunoassay; detection;
XX bovine; murine.

OS Homo sapiens.

PN DE19745443-A1.

PD 22-APR-1999.

PF 15-OCT-1997; 97DE-01045443.

PR 15-OCT-1997; 97DE-01045443.

PA (HERZ/) HERZOG-WESMER A.

PI Meesmer AH, Kiselev OI, Scheller A;

DR WPI; 1999-255775/22.

PT Diagnostic polyclonal antiserum specific for prion protein - obtained by
XX immunisation with metal-containing polypeptide.
PS Claim 3; Fig 1; 12pp; German.

XX This invention describes a novel process for producing a polyclonal
CC antiserum against a human or animal prion protein (PrP) which can be used
CC in immunoassays for detecting PrP's. The method comprises (a) selecting a
CC polypeptide that has a length of at least 10 amino acids and has an amino
CC acid sequence at least 70% homologous to that of human, bovine or murine
CC PrP in a region of at least 10 consecutive amino acids (b) binding a
CC metal to the polypeptide by reaction with a metal compound and (c)
CC injecting the metal-containing polypeptide into a host animal, optionally
CC together with adjuvants, to induce production of a polyclonal antiserum
XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC 46
DB 170 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC 215

Search completed: December 3, 2004, 00:55:35
Job time: 78.1639 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221

Sequence score: 244
1 SNQNNFVHDCVNITIKQHTV.....ENFTEDVVMERVVEQMCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	241	2 S71048	major prion protei
2	244	100.0	241	2 S71056	major prion protei
3	244	100.0	245	2 S71045	major prion protei
4	244	100.0	253	1 U0HU	major prion protei
5	244	100.0	253	2 184423	major prion protei
6	244	100.0	253	2 S71055	major prion protei
7	244	100.0	253	2 137032	major prion protei
8	243	99.6	226	2 A53892	prion-related prot
9	243	99.6	252	2 161848	major prion protei
10	243	99.6	254	2 A23544	major prion protei
11	242	99.2	264	2 S37137	prion protein - gr
12	241	98.8	232	2 S71041	major prion protei
13	240	98.4	254	2 B34759	prion protein - go
14	240	98.4	254	2 A34759	prion protein - Ch
15	239	98.0	245	2 S53627	major prion protei
16	239	98.0	252	2 S53621	major prion protei
17	239	98.0	253	2 S53624	major prion protei
18	239	98.0	253	2 S53623	major prion protei
19	239	98.0	253	2 S53620	major prion protei
20	239	98.0	253	2 S53625	major prion protei
21	239	98.0	253	2 S53635	prion protein - si
22	239	98.0	253	2 S53614	major prion protei
23	239	98.0	253	2 161847	major prion protei
24	239	98.0	253	2 S53616	major prion protei
25	239	98.0	253	2 S53617	major prion protei
26	239	98.0	253	2 S53618	major prion protei
27	239	98.0	256	2 U0268	major prion protei
28	239	98.0	264	2 A54330	major prion protei
29	238	97.5	256	2 S57149	prion protein - go

30	238	97.5	256	2 A54281	major prion protei
31	238	97.5	260	2 S53629	major prion protei
32	236	96.7	252	2 S53634	major prion protei
33	235	96.3	239	2 S53633	major prion protei
34	235	96.3	257	2 UQ1900	major prion protei
35	234	95.9	253	2 S53617	major prion protei
36	233	95.5	252	2 JC6175	prion protein - ra
37	232	95.1	254	1 U0HYIH	major prion PpP27-
38	232	95.1	257	2 A23545	major prion PpP27-
39	232	95.1	267	2 A37372	prion protein homo
40	77	31.6	267	1 U0UCH	major prion protei
41	76	31.1	273	2 A46280	prion protein - ch
42	61.5	25.2	533	1 D71338	probable ribose/ga
43	60.5	24.8	182	2 A10130	conserved hypotet
44	59	24.2	139	2 H90004	hypothetical prote
45	58.5	24.0	258	2 AF2524	hypothetical prote

ALIGNMENTS

RESULT 1
S71048
major prion protein - Calliobus moloch (fragment)
C:Species: Calliobus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDD:AAC50100.1; PIDD:g47551
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S71048
A:Status: nucleic acid sequence not shown
A:Accession: S53632
A:Residues: 1-203, 'R', '205-240 <SCM>
A:Molecule type: DNA
A:Residues: 1-203, 'R', '205-240 <SCM>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTKEGNTEDVVMERVVEQMCI 46
DB 163 SNQNNFVHDCVNITIKQHTVTTTKEGNTEDVVMERVVEQMCI 208

RESULT 2
S71056
major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDD:AAC50091.1; PIDD:g474361
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621

RESULT 5

major prion protein precursor - rhesus macaque
C/Species: Macaca mulatta (rhesus macaque)

C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004

C/Accession: 184423; S53622; S71054

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 184423

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40254; EMBL:U5163; NID:G595850; PIDN:AAA68635.1; PID:G5958

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53622

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1210,'R',212-253 <SCH>

A/Cross-references: EMBL:U08307

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-253 <SCW>

A/Cross-references: EMBL:U08307; NID:G474372; PIDN:AACS0095.1; PID:G474373

C/Supersfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 6

major prion protein - pig-tailed macaque
C/Species: Macaca nemestrina (pig-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71055; S53626

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71055

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AACS0094.1; PID:G4743

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53626

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-210,'R',212-247 <SCW>

A/Cross-references: EMBL:U08306

C/Supersfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 46
DB 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 7

major prion protein precursor - gorilla

C/Species: Gorilla gorilla (gorilla)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 137032

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 137032

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40252; EMBL:U5166; NID:G563208; PIDN:AAA68633.1; PID:G56320

C/Supersfamily: major prion protein

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 46
DB 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 8

prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LJA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Supersfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 226;
Best Local Similarity 97.8%; Pred. No. 1.7e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 46
DB 142 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC 187

RESULT 9

major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U5165; NID:G595852; PIDN:AAA68636.1; PID:G59585

C/Supersfamily: major prion protein

Query Match
 Best Local Similarity 99.6%; Score 243; DB 2; Length 252;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
 169 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKKMERVVEQMC1 46
 |||

RESULT 10
 A23544

Major prion protein precursor - mouse
 C:Species: Mus musculus (house mouse)
 C:Date: 22-Jul-1987 #sequence (house mouse)
 C:Accession: A23544; A23544; S02521; A22315
 R:Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.
 Cell 51, 651-662, 1987
 A:Title: Distinct prion proteins in short and long scrapie incubation period mice.
 A:Reference number: A23669; PMID:88052869; PMID:2890436
 A:Accession: A23669
 A:Molecule type: DNA
 A:Residues: 1-254 <MES>

A:Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA3997.1; PID:G200529
 A:Note: Experimental source: strains NZM and I/LmJ
 R:Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.
 Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
 A:Reference number: A23544; PMID:86313583; PMID:13462700
 A:Accession: A23544
 A:Molecule type: mRNA
 A:Residues: 1-254 <LOC>

R:Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
 Eur. J. Biochem. 172, 271-277, 1988
 A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain
 A:Reference number: S02521; PMID:8816695; PMID:2894984
 A:Accession: S02521
 A:Molecule type: protein
 A:Residues: 1-254 <HOP>

R:Chesebro, B.; Race, R.; Mehrl, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.
 Nature 315, 331-333, 1985
 A:Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and
 A:Reference number: A22315; PMID:85213844; PMID:13923361
 A:Accession: A22315
 A:Molecule type: mRNA
 A:Residues: 87-132, V, 134-164 <CHE>

C:Superfamily: major prion protein
 C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
 F:1-22/Domain: signal sequence #status predicted <Sig>
 F:23-231/Product: major prion protein #status predicted <Sig>
 F:232-254/Domain: carboxyl-terminal peptide #status predicted <MAP>
 F:178-213/Diulfide bonds: #status predicted
 F:180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted <CTP>
 F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match
 Best Local Similarity 99.6%; Score 243; DB 2; Length 254;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
 169 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKKMERVVEQMC1 46
 |||

RESULT 11
 S37137

Prion protein - greater kudu
 C:Species: Tragelaphus strepersos (greater kudu)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37137
 R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993

A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAP>
 A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G

Query Match
 Best Local Similarity 99.2%; Score 242; DB 2; Length 264;
 Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db
 181 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKKMERVVEQMC1 46
 |||

RESULT 12
 S71041

Major prion protein - black-handed spider monkey (fragment)
 C:Species: Ateles geoffroyi (black-handed spider monkey)
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71041; S53630
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>

A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; PMID:95139066; PMID:7837269
 A:Accession: S53630
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194, R, 196-231 <SCH>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
 Best Local Similarity 98.8%; Score 241; DB 2; Length 232;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
 154 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKKMERVVEQMC1 46
 |||

RESULT 13
 B34759

Prion protein - golden hamster
 C:Species: Mesocricetus auratus (golden hamster)
 C:Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
 C:Accession: B34759
 R:Womansley, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
 Mol. Cell. Biol. 10, 1153-1163, 1990
 A:Title: Three hamster species with different scrapie incubation times and neuropathology
 A:Reference number: A34759; PMID:90158578; PMID:2406562
 A:Accession: B34759
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-254 <LOW>
 A:Cross-references: GB:M33959; NID:G191182; PIDN:AAA37014.1; PID:G191183
 C:Superfamily: major prion protein

Query Match
 Best Local Similarity 98.4%; Score 240; DB 2; Length 254;
 Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db
 1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKKMERVVEQMC1 46
 |||

Db 170 NNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKMMERVVEQMCV 215

RESULT 14

A34759
prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_rev150n 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropatholog
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: Preliminary
A/Molecule type: DNA
A/Residues: 1-254 <IOM>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.4%; Score 240; DB 2; Length 254;
Pred. No. 4.5e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKMMERVVEQMC 46

Db 170 NNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKMMERVVEQMCV 215

RESULT 15

S53627
major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_rev150n 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53627; S71043
R/Schaezel, H.W.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291
R/Schaezel, H.W.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 98.0%; Score 239; DB 2; Length 245;
Pred. No. 5.8e-22;
Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKMMERVVEQMC 46

Db 162 SNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKMMERVVEQMC 207

Search completed: December 3, 2004, 00:38:37
Job time : 14.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221
Perfect score: 244
Sequence: 1 SNONNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQMCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt 02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	238	1	PRIO_CERAT
2	244	100.0	238	1	PRIO_THEGE
3	244	100.0	238	2	O86XR1
4	244	100.0	241	1	PRIO_CALMO
5	244	100.0	241	1	PRIO_MANSP
6	244	100.0	245	1	PRIO_CERAE
7	244	100.0	246	1	PRIO_CERNO
8	244	100.0	246	1	PRIO_CERNE
9	244	100.0	246	1	PRIO_CERPO
10	244	100.0	246	1	PRIO_ERYPA
11	244	100.0	246	2	AA083636
12	244	100.0	252	1	PRIO_CERAP
13	244	100.0	253	1	PRIO_COLAU
14	244	100.0	253	1	PRIO_GORGO
15	244	100.0	253	1	PRIO_HUMAN
16	244	100.0	253	1	PRIO_MACPA
17	244	100.0	253	1	PRIO_PONPY
18	244	100.0	253	1	PRIO_PRRER
19	244	100.0	253	2	O6FGR8
20	244	100.0	253	2	O6JL99
21	244	100.0	253	2	AA880162
22	244	100.0	253	2	AA812192
23	244	100.0	277	2	O6SES1
24	244	100.0	277	2	AA821603
25	244	100.0	285	2	O7S942
26	243	99.6	248	2	O866V6
27	243	99.6	253	2	O920T5
28	243	99.6	254	1	PRIO_MOUSE
29	243	99.6	254	1	PRIO_RAT
30	243	99.6	254	2	O8VHT6
31	243	99.6	254	2	AA019993

32	243	99.6	260	1	PRIO_SAIISC	P40258 salmirci sci
33	242	99.2	220	2	O866W7	O866W7 ochotona pr
34	242	99.2	226	2	O97907	O97907 gazella sub
35	242	99.2	227	2	O97909	O97909 tragelaphus
36	242	99.2	256	1	PRP2_TRAST	P40243 tragelaphus
37	242	99.2	264	1	PRP1_TRAST	P40242 tragelaphus
38	241	98.8	232	1	PRIO_ATEGE	P40246 ateles geof
39	241	98.8	252	1	PRIO_CALJA	P40247 callithrix
40	240	98.4	239	1	PRIO_AOTTR	P40245 aotus trivi
41	240	98.4	240	2	O8VHT4	O8VHT4 microtus ag
42	240	98.4	248	2	O8VHT5	O8VHT5 clethrionom
43	240	98.4	254	1	PRIO_CRIGR	O60506 cricetus
44	240	98.4	254	1	PRIO_CRIMI	O60468 cricetus
45	240	98.4	254	1	PRIO_SIGHI	O920C3 sigmodon hi

ALIGNMENTS

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ii
RESULT 1
PRIO_CERAT STANDARD; PRT; 238 AA.
AC O95145; O95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@sib-sib.ch).
CC
CC EMBL; U75384; AAB50623.1; -
CC FMBL; U75382; AAB50623.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC GlycoProtein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER 1
CC SIGNAL <1 15 By similarity.
CC CHAIN 16 215 Major prion protein.
FT

```

FT PROPEP 216 238 Removed in mature form (By similarity).
 FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
 FT DISULFID 164 199 By similarity.
 FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BE03E351B CRC64;

Query Match
 Best Local Similarity 100.0%; Score 244; DB 1; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 155 SNQNNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 2
 ID PRIOTHEGE STANDARD; PRT; 238 AA.
 AC 095270;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 05-JUL-2004 (Rel. 44, Last sequence update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP; Synonyms=PRP;
 OS Theropithecus galada (Gelada baboon).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Cercopithecinae; Primates; Catarrhini; Cercopithecidae;
 OX NCBI_TaxID=9565;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC EMBL; U75383; AAB50630.1; -;
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00397; Prion, 1.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION_1; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.

FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 215
 FT PROPEP 216 >238
 FT DISULFID 164 199
 FT LIPID 215 215
 FT CARBOHYD 166 166 By similarity.
 FT CARBOHYD 182 182 Major prion protein.
 FT DOMAIN 44 83 Removed in mature form (By similarity).
 FT REPEAT 44 52 GPI-anchor amidated serine (By similarity).
 FT REPEAT 53 60 N-linked (GlcNAc...) (Potential).
 FT REPEAT 61 68 N-linked (GlcNAc...) (Potential).
 FT REPEAT 69 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF60243EDB CRC64;

Query Match
 Best Local Similarity 100.0%; Score 244; DB 1; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 155 SNQNNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 3
 ID 086XR1 PRELIMINARY; PRT; 238 AA.
 AC 086XR1;
 DT 01-JUN-2003 (TREMBlrel. 24, Created)
 DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
 DE Prion protein (Fragment).
 GN Name=PRNP;
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AY219882; A4083635.1; -;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION_1; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR KW Prion.
 FT NON_TER 1 1
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;

Query Match
 Best Local Similarity 100.0%; Score 244; DB 2; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 155 SNQNNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 4
 ID PRIOTCALMO STANDARD; PRT; 241 AA.
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)

Db 155 SNQNNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 4
 ID PRIOTCALMO STANDARD; PRT; 241 AA.
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Callicebus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
 OC Callitrichus;
 OC NCBI_Taxid=9523;
 RN (1)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: U08312; AAC50100.1; -;
 DR PIR: S71048; S71048.
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF03991; Prion; 1.
 DR PRINTS: PR00341; Prion octapep; 6.
 DR PROSITE: PS00291; Prion; 1.
 DR PROSITE: PS00706; Prion_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 FM Signal.
 FT NON TER 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT DISULFID 172 207 By similarity.
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQNCI 208
 RESULT 5

PRIO MANSP STANDARD; PRT; 241 AA.
 ID PRIO MANSP
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillus.
 OC NCBI_Taxid=9561;
 RN (1)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: U08303; AAC50091.1; -;
 DR PIR: S71056; S71056.
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF03991; Prion; 1.
 DR PRINTS: PR00341; Prion.
 DR PROSITE: PS00291; Prion; 1.
 DR PROSITE: PS00706; Prion_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FM Signal.
 FT NON TER 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B2B59DE CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQNCI 46

Db 163 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKMERVWQKCI 208

RESULT 6
Prio_CERAB STANDARD; PRT; 245 AA.

ID AC P40250; 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 03-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euleleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534, 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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CC or send an email to license@isb-sib.ch).

DR EMBL; U08291; AAC50080.1; -
DR EMBL; U08292; AAC50081.1; -
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 5.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT CHAIN 1 22
FT SIGNAL 23 22
FT PROPEP 223 22
FT LIPID 222 22
FT DISULFID 171 206
FT CARBOHYD 173 173
FT CARBOHYD 189 189
FT DOMAIN 51 83
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 83 83
FT SEQUENCE 245 AA; 26885 MW; D582B58B2726C99A CRC64;

Query Match 100.0%; Score 244; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 162 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKMERVWQKCI 207

RESULT 7
Prio_CERMO STANDARD; PRT; 246 AA.

ID AC P61761; 095173; 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 03-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euleleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmid J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

DR EMBL; U75386; AAB50625.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT CHAIN 1 15
FT SIGNAL 16 15
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT SEQUENCE 245 AA; 26885 MW; D582B58B2726C99A CRC64;

FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MM; 835D147CA2B4FDD3 CRC64;

Query Match 100.0%; Score 244; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 208

RESULT 8

PRIO CERNE STANDARD; PRT; 246 AA.
ID PRIO CERNE 095172; 095173;
AC P61762; 095172; 095173;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U75387; AAB50626.1; -.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT 1.

FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MM; 835D147CA2B4FDD3 CRC64;

Query Match 100.0%; Score 244; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 208

RESULT 9

PRIO CERTE STANDARD; PRT; 246 AA.
ID PRIO CERTE 095176;
AC 095176;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U75385; AAB50628.1; -.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT REPEAT 44 52
FT 1.

FT DOMAIN 44 84 S X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 Q.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT REPEAT 84 84 5.
 SQ SEQUENCE 246 AA; 26914 MW; F58679CBBC5AD07 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 10
 ID_PRIO_ERYPA STANDARD; PRT; 246 AA.
 AC 095174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name-PrP;
 OS Erythrocytes patas (Red guenon) (Cercopithecus patas).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Cercopithecoidea; Cercopithecidae; Erythrocytes;
 OK NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; U75388; AAB50627.1; -
 DR HSP; P23907; IG04.
 DR Interpro; IPR000817; Prion.
 DR Pfam; PF00377; Prion.1.
 DR Pfam; PF03991; Prion.1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00391; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 By similarity.
 Major prion protein.
 Removed in mature form (By similarity).
 GPI-anchor amidated serine (By similarity).

FT DISTUFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
 FT DOMAIN 44 84 S X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 Q.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT REPEAT 84 84 5.
 SQ SEQUENCE 246 AA; 26884 MW; D35D105BEC53108 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 11
 ID_AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TRENBLrel. 27, Created)
 DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
 DE Prion protein (fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 OK NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B3C8841566 CRC64;
 Query Match 100.0%; Score 244; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 12
 ID_PRIO_CEBAP STANDARD; PRT; 252 AA.
 AC P40249;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN Name-PrP;
 OS Cebus apella (Brown-capped capuchin).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
 OK NCBI_TaxID=9515;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95139066; Pubmed=7837269;
 RT "Prion protein gene variation among primates."
 J. Mol. Biol. 245:362-374(1995).


```

CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC entities requires a license agreement (See http://www.1sb-sib.ch/announce/
CC or send an email to license@1sb-sib.ch).
CC -----
CC EMBL: U08295; AAC50084.1; -.
CC PIR: S53631; S53631.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC FT CHAIN 23 229 By similarity.
CC FT PROPEP 230 252 Major prion protein.
CC FT LIPID 229 229 Removed in mature form (By similarity).
CC FT LIPID 229 229 GPI-anchor amidated serine (By
CC similarity).
CC FT DISULFID 178 213 By similarity.
CC FT CARBOHYD 180 180 N-linked (GlcNAc... ) (Potential).
CC FT CARBOHYD 196 196 N-linked (GlcNAc... ) (Potential).
CC FT DOMAIN 51 90 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC 0.
CC FT REPEAT 51 58 1.
CC FT REPEAT 59 66 1.
CC FT REPEAT 67 74 2.
CC FT REPEAT 75 82 3.
CC FT REPEAT 83 90 4.
CC FT REPEAT 84 91 5.
CC SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;
CC -----
CC Query Match 100.0%; Score 244; DB 1; Length 252;
CC Best Local Similarity 100.0%; Pred. No. 1.6e-22;
CC Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC -----
Cc 1 SNONNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Cc |||
Cc 169 SNONNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQNCI 214
Cc |||
Cc -----
Cc RESULT 13
Cc PRIO COLGU STANDARD; PRT; 253 AA.
Cc AC P40251;
Cc DT 01-FEB-1995 (Rel. 31, Created)
Cc DT 01-FEB-1995 (Rel. 31, Last sequence update)
Cc DT 05-JUL-2004 (Rel. 44, Last annotation update)
Cc DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
Cc GN Name=PrNP.
Cc OS Colobus guereza (Black-and-white colobus monkey).
Cc OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Cc OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Colobinae;
Cc OC Colobus.
Cc NCBI_TaxID=33548;
Cc RX NCB1_TaxID=33548;
Cc RP SEQUENCE FROM N.A.
Cc MEDLINE=95133066; PubMed=7837269;

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RA Scharzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RA "Prion protein gene variation among primates.";
RA J. Mol. Biol. 245:362-374(1995).
RA (2)
RA SEQUENCE OF 8-253 FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RA "Evidence for an increased substitution rate of the hominoid prion
RA protein gene during the period of brain expansion.";
RA Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
RA -----
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: U08297; AAC50086.1; -.
CC EMBL: U75389; AAB50624.1; -.
CC PIR: S53618; S53618.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC FT CHAIN 23 230 By similarity.
CC FT PROPEP 231 253 Major prion protein.
CC FT LIPID 230 230 Removed in mature form (By similarity).
CC FT LIPID 230 230 GPI-anchor amidated serine (By
CC similarity).
CC FT DISULFID 179 214 By similarity.
CC FT CARBOHYD 181 181 N-linked (GlcNAc... ) (Potential).
CC FT CARBOHYD 197 197 N-linked (GlcNAc... ) (Potential).
CC FT DOMAIN 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC 0.
CC FT REPEAT 51 59 1.
CC FT REPEAT 60 67 2.
CC FT REPEAT 68 75 3.
CC FT REPEAT 76 83 4.
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CC SQ SEQUENCE 253 AA; 27626 MW; 14B17477881F5316 CRC64;
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Cc 170 SNONNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQNCI 215
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Cc AC P40252; Q28419;
Cc DT 01-FEB-1995 (Rel. 31, Created)
Cc DT 01-FEB-1995 (Rel. 31, Last sequence update)
Cc DT 05-JUL-2004 (Rel. 44, Last annotation update)

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DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PrNP;
 OS Gorilla gorilla gorilla (Lowland gorilla).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Gorilla.
 RN NCBI_TaxId=9595;
 RP
 RX MEDLINE=9533066; PubMed=7837269.
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 RN [2]
 RP
 RX MEDLINE=9508366; PubMed=7991600;
 RA Rubenstein R., Dubnick W., Gibbs C.J., Gajewski D.C.,
 RT "Infectious amyloid precursor gene sequences in primates used for
 RL experimental transmission of human sporadic encephalopathy.";
 CC Proc. Natl. Acad. Sci. U.S.A. 91:12153-12162(1994).
 CC
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible spongiform encephalopathy (TSE), etc.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC EMBL; U08300; AAC50089.1;
 CC EMBL; U15166; AAA68633.1;
 CC PIR; I37032; I37032.
 CC PIR; S53614; S53614.
 CC HSP; P04156; I14M.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS; PR00391; Prion; octapep; 6.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC GlycoProtein; GPI-anchor; 1.
 CC SIGNAL
 CC CHAIN 1 22 By similarity; Prion; Repeat; Signal.
 CC PROPEP 23 230 Major prion protein.
 CC LIPID 231 253 Removed in mature form (By similarity).
 CC LIPID 230 230 GPI-anchor amidated serine (By similarity).
 CC DISULFID 179 214 By similarity.
 CC CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 CC CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 CC DOMAIN 51 91 S x 8 AA tandem repeats of P-H-G-G-G-W-G-
 CC REPEAT 51 59 Q.
 CC REPEAT 60 67 1.
 CC REPEAT 68 75 2.
 CC REPEAT 76 83 3.
 CC REPEAT 84 91 4.
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Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 170 SNONNFVHCNVITTKHVTITTTTGGNFETEDVKMERVQKCI 215
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 AC P04156; O60489; P78446; Q15216; Q15221; Q8TBG0; Q96E70; Q9UP19;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-NOV-1986 (Rel. 03, Last sequence update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (ASCR)
 DE (CD230 antigen).
 GN Name=PrNP;
 OS Homo sapiens (human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 RN NCBI_TaxId=9606;
 RP
 RX MEDLINE=86300093; PubMed=3755672;
 RA Kretschmar H.A., Stowring L.E., Westaway D., Stubblebine W.H.,
 RA Prusiner S.B., Dearmond S.J.;
 RT "Molecular cloning of a human prion protein cDNA.";
 RL DNA 5:315-324(1986).
 RN [2]
 RP
 RX MEDLINE=99018115; PubMed=9799790;
 RA Lee I.Y., Westaway D., Smit A.P.A., Wang K., Seto J., Chen L.,
 RA Acharya C., Ankner M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 RL region from three mammalian species.";
 RN Genome Res. 8:1022-1037(1998).
 RN [4]
 RP
 RX MEDLINE=21638749; PubMed=11780052; DOI=10.1038/41485a;
 RA Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,
 RA Jones M., Steward G., Almeida J.P., Babbage A.K., Bagguley C.L.,
 RA Beasley O.P., Bird C.P., Bates K.N., Beard L.M., Beard D.M.,
 RA Buck D., Burdill W.D., Butler A.P., Carder C., Carter N.P.,
 RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
 RA Chigusa S., Cowley V.E., Collier R.E., Connor R.E., Corry N.R.,
 RA Coulson A.G., Cowillie G.J., Deadman R., Dhand P.D., Dunn M.R.,
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
 RA Grafham D.V., Griffiths C., Griffiths M.N.D., Gillman R., Hall R.E.,
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
 RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
 RA Lehar V.L., Martin S.L., Levenson M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
 RA Marsh V.L., Martin S.L., Levenson M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
 RA Oliver K., Parker D., Moore M.J.F., Mullikin J.C., Nickerson T.,
 RA Phillips B.J.C.T., Prabhalingam S.R., Plumb R.W., Peck A.L.,
 RA Rice C.M., Ross M.T., Scott C.B., Senra H.K., Showkneen R., Sims S.,

RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
 RA Swann R.M., Symamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
 RA Tracacy A., Tromans A.C., Vaudin M., Wallis J.M.,
 RA Whitehead S.L., Whitaker P., Willey D.L., Williams L., Williams S.A.,
 RA Wilmshurst L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
 RA Rogers J.,
 RT "The DNA sequence and comparative analysis of human chromosome 20.";
 RL Nature 414:865-871(2001).
 [6]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain, AND Ovary;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusha K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Uebli T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mulhally S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hultk S.W.,
 RA Villalón D.K., Murthy D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whitting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butlerfield Y.S.N., Krzywinski M.I., Skalka U., Smalilus D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 [7]
 RP SEQUENCE OF 8-253 FROM N.A.
 RX MEDLINE=86261778; PubMed=3014653;
 RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.;
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping, and
 RT biological implications.";
 RL Science 233:364-367(1986).
 [8]
 RP SEQUENCE OF 9-222 FROM N.A., AND VARIANT 56-GLY-GLY-63 DEL.
 RX TISSUE=Brain;
 RC MEDLINE=93250789; PubMed=1363802;
 RA Diedrich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,
 RA Emory C.R., Sung J.H., Haase A.T.;
 RT "Deletion in the prion protein gene in a demented patient.";
 RL Hum. Mol. Genet. 1:443-444(1992).
 [9]
 RP SEQUENCE OF 41-85 FROM N.A., AND VARIANT 56-GLY-GLY-63 DEL.
 RX MEDLINE=96090306; PubMed=7485229;
 RA Perry R.T., Go R.C., Harrell L.E., Acton R.T.;
 RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)
 RT detects two different 24 bp deletions in an atypical Alzheimer's
 RT disease family.";
 RL Am. J. Med. Genet. 60:12-18(1995).
 [10]
 RP SEQUENCE OF 58-85 AND 111-150.
 RX MEDLINE=91160504; PubMed=1672107;
 RA Tagliaferri P., Prelli F., Ghiso J., Bugiani O., Serban D.,
 RA Prusiner S.B., Farlow M.R., Ghetti B., Frangione B.,
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal
 RT glycine at codon 58.";
 RL EMBO J. 10:513-519(1991).
 [11]
 RP SEQUENCE OF 84-91 FROM N.A.
 RX MEDLINE=92073400; PubMed=1683708;
 RA Goldfarb L.G., Brown P., McCombie W.R., Goldgaber D., Swergold G.D.,
 RA Mills P.R., Cervenakova L., Baron H., Gibbs C.J. Jr., Gajdusek D.C.;
 RT "Transmissible familial Creutzfeldt-Jakob disease associated with
 RT five, seven, and eight extra octapeptide coding repeats in the PRNP
 RT gene.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).

RN [12]
 RP STRUCTURE BY NMR OF 23-230.
 RX MEDLINE=20087216; PubMed=10618385;
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
 RA Lopez Garcia F., Billeter M., Calzolari L., Wider G., Wüthrich K.;
 RT "NMR solution structure of the human prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).
 [13]
 RP STRUCTURE BY NMR OF 118-221.
 RX MEDLINE=20359708; PubMed=10900000;
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
 RA Zahn R., Wüthrich K.;
 RT "NMR structures of three single-residue variants of the human prion
 RT protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
 [14]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=93372867; PubMed=8364585;
 RA Palmer M.S., Collinge J.;
 RT "Mutations and polymorphisms in the prion protein gene.";
 RL Hum. Mutat. 2:168-173(1993).
 [15]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=94029646; PubMed=8105771;
 RA Prusiner S.B.;
 RT "Genetic and infectious prion diseases.";
 RL Arch. Neurol. 50:1129-1153(1993).
 [16]
 RP VARIANT GSD LEU-102.
 RX MEDLINE=89159432; PubMed=2564168;
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
 RA Terwilliger J.D., Westaway D., Ott J., Prusiner S.B.;
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
 RT syndrome.";
 RL Nature 338:342-345(1989).
 [17]
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.
 RX MEDLINE=89392018; PubMed=2783132;
 RA Doh-Ura K., Tateishi J., Sasaki H., Kitamoto T., Sakaki Y.;
 RT "Pro--Leu change at position 102 of prion protein is the most common
 RT but not the sole mutation related to Gerstmann-Strausler syndrome.";
 RL Biochem. Biophys. Res. Commun. 163:974-979(1989).
 [18]
 RP VARIANT PFI ASN-178.
 RX MEDLINE=92195483; PubMed=1347910;
 RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,
 RA Timpone P., Lugaresi E., Gambetti P.;
 RT "Fatal familial insomnia: a second kindred with mutation of prion
 RT protein gene at codon 178.";
 RL Neurology 42:669-670(1992).
 [19]
 RP VARIANT CJD ASN-178.
 RX MEDLINE=91124933; PubMed=1671440;
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanan J.,
 RA McCombie W.R., Trepp S., Gajdusek D.C.;
 RT "New mutation in scrapie amyloid precursor gene (at codon 178) in
 RT Finnish Creutzfeldt-Jakob kindred.";
 RL Lancet 337:425-425(1991).
 [20]
 RP VARIANT CJD IYS-200.
 RX MEDLINE=90355709; PubMed=1975028;
 RA Goldfarb L., Miltrova E., Brown P., Toh B.K., Gajdusek D.C.;
 RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters
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 RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).

Query Match 100.0%; Score 244; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1,6e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Fri Dec 3 10:53:54 2004

Search completed: December 3, 2004, 00:35:27
Job time : 76.3541 sec8

us-10-031-975-1_copy_176_221.rup

Page 10

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221

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Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	244	100.0	252 4 US-09-431-887-17	Sequence 17, Appl
5	244	100.0	253 1 US-08-242-188-2	Sequence 2, Appl
6	244	100.0	253 1 US-08-509-261A-2	Sequence 2, Appl
7	244	100.0	253 1 US-08-660-626-8	Sequence 8, Appl
8	244	100.0	253 1 US-08-692-892-2	Sequence 2, Appl
9	244	100.0	253 2 US-08-713-939A-2	Sequence 2, Appl
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36	243	99.6	254 2 US-08-713-939A-1	Sequence 1, Appl
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42	243	99.6	254 3 US-09-823-494-19	Sequence 19, Appl
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ALIGNMENTS

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RESULT 1
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; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valetta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

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Query Match 100.0%; Score 244; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 6.1e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKMERVVEQNCI 46
DB 81 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKMERVVEQNCI 126

RESULT 2

US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 162 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 3

US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match
Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 162 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 4

US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 252;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 214

RESULT 5

US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESS: Karl Bosicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bosicovic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 253 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match

Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 6

US-08-509-261A-2
 ; Sequence 2, Application US/08509261A
 ; Patent No. 5763244
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: Method of Detecting Prions
 ; TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Bozicevic & Reed, LLP
 ; STREET: 285 Hamilton Avenue, Suite 200
 ; CITY: Palo Alto
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94301
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FASTSEQ for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/509,261A
 ; FILING DATE: 31-JUL-1995
 ; CLASSIFICATION: 800
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER:
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bozicevic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 6510-030001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650-327-3400
 ; TELEFAX: 650 327-3231
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ;
 ; US-08-509-261A-2
 ;
 ; Query Match 100.0%; Score 244; DB 1; Length 253;
 ; Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 ; Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 ;
 ; Db 1 SNONNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
 ; 170 SNONNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMC1 215
 ;
 ; RESULT 7
 ; US-08-660-626-8
 ; Sequence 8, Application US/08660626
 ; Patent No. 5789655
 ; GENERAL INFORMATION:
 ; APPLICANT: Stanley B. Prusiner
 ; APPLICANT: Fred E. Cohen
 ; APPLICANT: Glenn C. Telling
 ; APPLICANT: Michael R. Scott
 ; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
 ; TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS
 ; NUMBER OF SEQUENCES: 13
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Fish & Richardson
 ; STREET: 2200 Sand Hill Road, Suite 100
 ; CITY: Menlo Park
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94025

COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Asclii
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/660,626
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Valeta Greg
 ; REGISTRATION NUMBER: 35,127
 ; REFERENCE/DOCKET NUMBER: 07532/003001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 322-5070
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 8:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; ORIGINAL SOURCE:
 ; ORGANISM: HUMAN PRION PROTEIN, HuPrP
 ;
 ; US-08-660-626-8
 ;
 ; Query Match 100.0%; Score 244; DB 1; Length 253;
 ; Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 ; Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 ;
 ; Db 1 SNONNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
 ; 170 SNONNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMC1 215
 ;
 ; RESULT 8
 ; US-08-692-892-2
 ; Sequence 2, Application US/08692892
 ; Patent No. 5792901
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
 ; TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bozicevic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/692,892
 ; FILING DATE: 30-JULY-1996
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bozicevic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 06510/056001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 322-5070
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match
Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 46
Db 170 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 215

RESULT 9
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match
Best Local Similarity 100.0%; Score 244; DB 2; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 46
Db 170 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 215

RESULT 10

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match
Best Local Similarity 100.0%; Score 244; DB 2; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 46
Db 170 SNQNNFVHDCVNIITIKOHTVTTTGGKGFETDVKMERVVEQMC 215

RESULT 11
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 12
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 13
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fieh & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Boricevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TEXT:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 14
US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match
 Best Local Similarity 100.0%; Score 244; DB 3; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEOMCI 46
 DB 170 SNONNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEOMCI 215

RESULT 15
 US-09-550-374-2
 Sequence 2, Application US/09550374
 Patent No. 6372214
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Williamson, R. Anthony
 TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
 NUMBER OF SEQUENCES: 86
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson P.C.
 STREET: 2200 Sand Hill Road
 CITY: Menlo Park
 STATE: CA
 COUNTRY: U.S.A.
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FASTSEQ Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/550,374
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/036,579
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicewicz, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/059001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-854-5277
 TELEFAX: 415-854-0875
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: Single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-09-550-374-2

Query Match
 Best Local Similarity 100.0%; Score 244; DB 3; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEOMCI 46
 DB 170 SNONNFVHDCVNTTKKHVTYTTTGGNFETDVKKMERVVEOMCI 215

Search completed: December 3, 2004, 00:18:54
 Job time: 18.4197 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221
Perfect score: 244
Sequence: 1 SNQNNFVHDCVNITTKQHTV.....ENFTETDYKMERVVEQMKI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA.*
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2: /cgn2_6/ptodata/1/pubpaa/PCY_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
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6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
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11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
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15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
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18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	244	100.0	117	14	US-10-050-902-348
2	244	100.0	117	14	US-10-050-898-348
3	244	100.0	117	14	US-10-346-190-89
4	244	100.0	141	16	US-10-612-356A-1
5	244	100.0	162	9	US-09-745-003-10
6	244	100.0	163	14	US-10-104-047-2013
7	244	100.0	200	16	US-10-470-848-10
8	244	100.0	208	16	US-10-470-848-3
9	244	100.0	208	17	US-10-745-393-1
10	244	100.0	245	14	US-10-304-630-5
11	244	100.0	245	14	US-10-304-630-15
12	244	100.0	252	14	US-10-304-630-17
13	244	100.0	253	9	US-09-823-494-20

14	244	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
15	244	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
16	244	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
17	244	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
18	244	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
19	244	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
20	244	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
21	244	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
22	244	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
23	244	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
24	244	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
25	244	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
26	244	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
27	244	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
28	244	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
29	244	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
30	244	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
31	244	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
32	244	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1
33	244	100.0	253	14	US-10-435-602-2	Sequence 2, Appl1
34	244	100.0	253	15	US-10-301-448-21	Sequence 21, Appl1
35	244	100.0	253	15	US-10-301-448-22	Sequence 32, Appl1
36	244	100.0	253	15	US-10-301-448-32	Sequence 32, Appl1
37	244	100.0	253	16	US-10-648-593-151	Sequence 151, Appl1
38	244	100.0	253	16	US-10-470-848-2	Sequence 2, Appl1
39	244	100.0	253	16	US-10-772-656-54	Sequence 54, Appl1
40	244	100.0	592	17	US-10-745-393-3	Sequence 3, Appl1
41	243	99.6	124	14	US-10-050-902-324	Sequence 324, Appl1
42	243	99.6	124	14	US-10-050-898-324	Sequence 324, Appl1
43	243	99.6	124	14	US-10-346-190-93	Sequence 93, Appl1
44	243	99.6	164	9	US-09-745-003-12	Sequence 12, Appl1
45	243	99.6	209	16	US-10-470-848-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Piosek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 2

US-10-050-898-348
Sequence 348; Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT FILING DATE: 2002-01-18
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 3

US-10-346-190-89
Sequence 89; Application US/10346190
Publication No. US2003021945A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellisio, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT FILING DATE: 2003-01-17
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/336,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/333,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 4

US-10-612-356A-1
Sequence 1; Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lührs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 244; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.1e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 81 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 126

RESULT 5

US-09-745-003-10
Sequence 10; Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT FILING DATE: US/09/745,003
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 244; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.2e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 79 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 124

RESULT 6
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2013
LENGTH: 163
TYPE: PRT
ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 244; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 80 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 125

RESULT 7
US-10-470-848-10
Sequence 10, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCT
CURRENT APPLICATION NUMBER: US/10/470,848
CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 200
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 244; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 140 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 185

RESULT 8
US-10-470-848-3
Sequence 3, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCT
CURRENT APPLICATION NUMBER: US/10/470,848

CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 244; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 193

RESULT 9
US-10-745-393-1
Sequence 1, Application US/10745393
Publication No. US2004020311A1
GENERAL INFORMATION:
APPLICANT: Faatz, Elke
APPLICANT: Scholz, Christian
APPLICANT: Stock, Werner
APPLICANT: Schaarschmidt, Peter
TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
FILE REFERENCE: 12290 US3 (9793/141)
CURRENT APPLICATION NUMBER: US/10/745,393
CURRENT FILING DATE: 2003-12-23
PRIOR APPLICATION NUMBER: EP 0115225.3
PRIOR FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: EP 01120939.2
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 10/167,774
PRIOR FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US 10/179,905
PRIOR FILING DATE: 2002-06-24
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 244; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 193

RESULT 10
US-10-304-630-5
Sequence 5, Application US/10304630
Publication No. US20030161836A1
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/10/304,630
CURRENT FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 5
 LENGTH: 245
 TYPE: PRN
 ORGANISM: Cercopithecus aethiops
 US-10-304-630-5

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 46
 Db 162 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 207

RESULT 11
 US-10-304-630-15
 Sequence 15, Application US/10304630
 Publication No. US20030161836A1
 GENERAL INFORMATION:
 APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/10/304,630
 PRIOR FILING DATE: 2002-11-26
 PRIOR APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 15
 LENGTH: 245
 TYPE: PRN
 ORGANISM: Cercopithecus diana
 US-10-304-630-15

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 46
 Db 162 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 207

RESULT 12
 US-10-304-630-17
 Sequence 17, Application US/10304630
 Publication No. US20030161836A1
 GENERAL INFORMATION:
 APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/10/304,630
 PRIOR FILING DATE: 2002-11-26
 PRIOR APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 17
 LENGTH: 252
 TYPE: PRN
 ORGANISM: Cebus sp.
 US-10-304-630-17

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 252;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 46
 Db 169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 214

RESULT 13
 US-09-823-494-20
 Sequence 20, Application US/09823494
 Publication No. US20010041790A1
 GENERAL INFORMATION:
 APPLICANT: Cheesbro, Bruce W
 APPLICANT: Chabrey, Byron W
 APPLICANT: Priola, Susette
 TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
 FILE REFERENCE: 50121
 CURRENT APPLICATION NUMBER: US/09/823,494
 PRIOR FILING DATE: 2001-03-30
 PRIOR APPLICATION NUMBER: 09/128,450
 NUMBER OF SEQ ID NOS: 29
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 20
 LENGTH: 253
 TYPE: PRN
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match
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 Db 170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 14
 US-09-904-987-3
 Sequence 3, Application US/09904987
 Patent No. US20020037908A1
 GENERAL INFORMATION:
 APPLICANT: No. US20020037908A1, Inc.
 TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepathc
 FILE REFERENCE: 42108/26146
 CURRENT APPLICATION NUMBER: US/09/904,987
 CURRENT FILING DATE: 2001-07-12
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Patent Ver. 3.0
 SEQ ID NO 3
 LENGTH: 253
 TYPE: PRN
 ORGANISM: homo sapiens
 PUBLICATION INFORMATION:
 DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567
 DATABASE ENTRY DATE: 2001-04-17
 RELEVANT RESIDUES: (1)..(253)
 US-09-904-987-3

Query Match
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 Db 170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 215

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RESULT 15
US-09-919-172-57
; Sequence 57, Application US/09919172
; Patent No. US20020119463A1
; GENERAL INFORMATION:
; APPLICANT: Paris, Mary
; APPLICANT: Turner, Christopher M.
; TITLE OF INVENTION: PROSTATE CANCER MARKERS
; FILE REFERENCE: PA-0036 US
; CURRENT APPLICATION NUMBER: US/09/919,172
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/222,469
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PERL Program
; SEQ ID NO 57
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1256895CD1
US-09-919-172-57

Query Match          100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      170 SNQNNFVHDCVNTTIKQHTVTTTGGENFTETDVKKMERVVEQWCI 215

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OM protein - protein search, using sw model

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(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTTTKGENTFEDVKMER 36

Scoring table: BLOSUM62
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Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	193	100.0	117	ABG80669	ABG80669 Human pri
3	193	100.0	117	ADD24196	ADD24196 Modified
4	193	100.0	124	ABG94340	ABG94340 Mouse mpr
5	193	100.0	124	ABG80652	ABG80652 Mouse trn
6	193	100.0	124	ADD24200	ADD24200 mpr-ec
7	193	100.0	142	AAW17686	AAW17686 prion pro
8	193	100.0	163	ADB63859	ADB63859 Human pri
9	193	100.0	200	ABG31907	ABG31907 Human pri
10	193	100.0	208	ABG07316	ABG07316 Mouse pri
11	193	100.0	208	ABG07318	ABG07318 Human pri
12	193	100.0	208	ABG07327	ABG07327 Mouse pri
13	193	100.0	208	ABG07329	ABG07329 Human pri
14	193	100.0	208	ABG31902	ABG31902 Human pri
15	193	100.0	208	ABG31904	ABG31904 Chimera-t
16	193	100.0	208	ADJ66133	ADJ66133 Mouse pri
17	193	100.0	209	ABG31905	ABG31905 HCHV type
18	193	100.0	211	AAH30801	AAH30801 amino aci
19	193	100.0	225	ABR42793	ABR42793 Rat prion
20	193	100.0	226	ADB85240	ADB85240 Rat prion
21	193	100.0	245	AAH72342	AAH72342 Monkey pr
22	193	100.0	245	AAH72352	AAH72352 Cercopit
23	193	100.0	253	AAH86715	AAH86715 Human pri
24	193	100.0	253	AAW59660	AAW59660 Human pri
25	193	100.0	253	AAH85901	AAH85901 Human pri

26	193	100.0	253	2	AAV07994	AAV07994 Human pri
27	193	100.0	253	3	AAH81485	AAH81485 Human pri
28	193	100.0	253	3	AAH06272	AAH06272 Human pri
29	193	100.0	253	3	AAH15035	AAH15035 Human pri
30	193	100.0	253	4	AAH72339	AAH72339 Chimpanze
31	193	100.0	253	4	AAH72347	AAH72347 prion pro
32	193	100.0	253	4	AAH72353	AAH72353 Guereza p
33	193	100.0	253	4	AAH72344	AAH72344 Rhesus mo
34	193	100.0	253	4	AAH72345	AAH72345 Gibbon pr
35	193	100.0	253	4	AAH72350	AAH72350 Marmoset
36	193	100.0	253	4	AAH72351	AAH72351 Hamadryas
37	193	100.0	253	4	AAH72348	AAH72348 prion pro
38	193	100.0	253	4	AAH72356	AAH72356 Siaman p
39	193	100.0	253	4	AAH72346	AAH72346 prion pro
40	193	100.0	253	4	AAH72355	AAH72355 prion pro
41	193	100.0	253	4	AAH72349	AAH72349 prion pro
42	193	100.0	253	4	AAH72340	AAH72340 Orangutan
43	193	100.0	253	4	AAH72338	AAH72338 Human pri
44	193	100.0	253	4	AAH72354	AAH72354 Capuchin
45	193	100.0	253	4	AAH72341	AAH72341 Gorilla p

ALIGNMENTS

RESULT 1
ID ABG94357
ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; anti-allergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WC-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organism comprising
CC at least one first attachment site, where the organism is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX PI WPI; 2003-598483/56.
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNIITIKQHTVTTTNGENFTEDVKMER 36
 DB 52 NNPFVHDCVNIITIKQHTVTTTNGENFTEDVKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrp protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN MO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-1B000166.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 XX WPI; 2002-627351/67.
 DR
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNIITIKQHTVTTTNGENFTEDVKMER 36
 DB 53 NNPFVHDCVNIITIKQHTVTTTNGENFTEDVKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; muten;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angiotensinoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 XX

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 XX PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 XX PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOWEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C;
 XX WPI; 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX
 PS Example 7; Page 415; 418pp; English.
 XX
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigeniser comprising at least one first attachment
 CC site, where the antigeniser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGS-mediated allergic reactions, anaphylaxis, adult
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, allergic asthma,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 CC
 XX
 SQ Sequence 124 AA;
 XX
 QY
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 53 NNFFVDDCVNITIKKHVTTTTTKGKNTFTDVKMMR 36
 1 NNFFVDDCVNITIKKHVTTTTTKGKNTFTDVKMMR 88

RESULT 6
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrPc-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP, PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW Creutzfeldt-Jakob Disease; prion; mPrPc-EK-Fc*.
 XX
 OS Unidentified.
 OS
 OS prion.
 XX
 PN WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-15000166.
 PR 08-JUL-2002; 2002US-0393725P.
 XX PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pellletier E, Renner WA;
 PI WPI; 2003-598483/56.
 DR
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPc-EK-Fc*)
 CC which was used during the exemplification of the invention.
 CC
 XX
 SQ Sequence 124 AA;
 XX
 QY
 Query Match 100.0%; Score 193; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 53 NNFFVDDCVNITIKKHVTTTTTKGKNTFTDVKMMR 36
 1 NNFFVDDCVNITIKKHVTTTTTKGKNTFTDVKMMR 88

RESULT 7
 AA017686
 ID AA017686 standard; peptide; 142 AA.
 XX
 AC AA017686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP, alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD.
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 XX Homo sapiens.
 OS
 PN MO9716728-A1.
 XX
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96WO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556823.
 PR
 XX (REGC) UNITV CALIFORNIA.
 PA Prusiner SB, Kaneko K, Cohen FE;
 XX
 XX MPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 XX Claim 11; Page 7-38; 50pp; English.
 PS
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment of prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 119

RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 XX Human protein encoded by clone ASTRO20055570.
 DE
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 XX Homo sapiens.
 OS
 PN EP1308459-A2.
 XX
 XX 07-MAY-2003.
 PD
 XX 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001JP-00379238.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Isegai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S,
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
 XX
 XX MPI; 2003-450961/43.
 DR
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 XX Claim 1; Page; 222pp; English.
 PS
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide, or as a probe
 CC is useful as a primer for synthesizing the polynucleotide, and encoded
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 XX Sequence 163 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 118

RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 XX Human prion protein related peptide #6.
 DE
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 KM
 XX Homo sapiens.
 OS
 PN WO200261418-A1.
 XX
 XX 08-AUG-2002.
 PD

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XX 31-JAN-2002; 2002MO-JP000803.
PF 31-JAN-2001; 2001JP-00024279.
XX (TOHO) UNIV TOHOKU.
XX Klamato T, Miyoshi K, Mohri S;
PI WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a human prion related protein of the
XX invention.
SQ Sequence 200 AA;

Query Match          100.0%; Score 193; DB 5; Length 200;
Best Local Similarity 100.0%; Pred. No. 1.4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVQMMER 36
    |||||
DB 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVQMMER 178

RESULT 10
AAB07316
ID AAB07316 standard; protein; 208 AA.
AC AAB07316;
XX
DT 17-OCT-2000 (first entry)
XX
DE Mouse prion protein sequence.
XX
KW Mouse; prion protein; transmissible spongiform encephalopathy;
KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT Region 37..68
FT /note="Repeat region consisting of tandem repeats of
FT Disulfide-bond 156..191
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Modified-site 208
FT /note="C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX PA
XX

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XX Hope J, Barnard GJR, Birkett CR;
PI WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
PT transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
CC Conversion of the normal cellular form of PrP into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC and Gerstmann-Strausler-Scheinker syndrome (GSS), Creutzfeldt-Jacob disease (CJD)
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a PrP epitope is captured by an
CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC epitopes (AAB07320-807326) are derived from the processed resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
SQ Sequence 208 AA;

Query Match          100.0%; Score 193; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVQMMER 36
    |||||
DB 150 NNFVHDCVNITIKOHTVTTTGGNFETEDVQMMER 185

RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA.
AC AAB07318;
XX
DT 17-OCT-2000 (first entry)
XX
DE Human prion protein sequence.
XX
KW Human; prion protein; transmissible spongiform encephalopathy;
KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 29..69
FT /note="Repeat region consisting of tandem repeats of
FT Disulfide-bond 157..192
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Modified-site 208
FT /note="C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
PI WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of

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transmissible spongiform encephalopathies in bovines.

Discloure; Page 43-44; 50pp; English.

The present sequence is the human prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNIITIKQHTVTTTGGENTFTDVKMER 36
 151 NNFVHDCVNIITIKQHTVTTTGGENTFTDVKMER 186

RESULT 12
 AAB07327
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 DT 17-OCT-2000 (first entry)
 DE Mouse prion protein sequence.
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 OS Mus sp.
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 PN WO200029849-A1.
 PD 25-MAY-2000.
 PF 27-OCT-1999; 99WO-FI000896.
 PR 17-NOV-1998; 98FI-00002480.
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 DR WPI; 2000-399778/34.
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 PS Discloure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNIITIKQHTVTTTGGENTFTDVKMER 36
 150 NNFVHDCVNIITIKQHTVTTTGGENTFTDVKMER 185

RESULT 13
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 DT 17-OCT-2000 (first entry)
 DE Human prion protein sequence.
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 PN WO200029849-A1.
 PD 25-MAY-2000.
 PF 27-OCT-1999; 99WO-FI000896.
 PR 17-NOV-1998; 98FI-00002480.
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 DR WPI; 2000-399778/34.
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 PS Discloure; Page 43-44; 50pp; English.
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

RESULT 14

ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX MO200261418-A1.

XX 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI: 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 XX prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX

SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

RESULT 15
 ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI: 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 XX prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX

SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

Search completed: December 3, 2004, 00:55:36
 Job time : 59.6066 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTKGKNTFTDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	193	100.0	226 2 A53892	prion-related prot
2	193	100.0	232 2 S71041	major prion protei
3	193	100.0	241 2 S71048	major prion protei
4	193	100.0	241 2 S71056	major prion protei
5	193	100.0	245 2 S53627	major prion protei
6	193	100.0	245 2 S71045	major prion protei
7	193	100.0	252 2 S53634	major prion protei
8	193	100.0	252 2 S53631	major prion protei
9	193	100.0	253 1 UHUH	major prion protei
10	193	100.0	253 2 S53624	major prion protei
11	193	100.0	253 2 S53623	major prion protei
12	193	100.0	253 2 S53620	major prion protei
13	193	100.0	253 2 S53625	major prion protei
14	193	100.0	253 2 I84423	major prion protei
15	193	100.0	253 2 S71055	major prion protei
16	193	100.0	253 2 S53617	major prion protei
17	193	100.0	253 2 S53615	major prion protei
18	193	100.0	253 2 S53614	major prion protei
19	193	100.0	253 2 I17032	major prion protei
20	193	100.0	253 2 I1847	major prion protei
21	193	100.0	253 2 S53616	major prion protei
22	193	100.0	253 2 S53618	major prion protei
23	193	100.0	253 2 S53619	major prion protei
24	193	100.0	254 2 B34759	prion protein - go
25	193	100.0	254 2 A34759	prion protein - ch
26	193	100.0	254 2 A23544	major prion protei
27	192	99.5	252 2 I61848	major prion protei
28	192	99.5	260 2 S53629	major prion protei
29	191	99.0	264 2 S37137	prion protein - gr

30	189	97.9	239 2 S53633	major prion protei
31	188	97.4	254 1 UHVIH	major prion Pp-Sc
32	188	97.4	256 2 JU0268	major prion protei
33	188	97.4	257 2 A23545	major prion PpP27-
34	188	97.4	264 2 A54330	major prion protei
35	187	96.9	256 2 S37149	prion protein - go
36	187	96.9	256 2 A54281	major prion protei
37	185	95.9	257 2 JU0190	major prion protei
38	182	94.3	252 2 JC6175	prion protein - ra
39	58	30.1	139 2 H90004	hypothetical prote
40	54	28.0	423 2 E97165	flagellar hook pro
41	54	28.0	511 2 C69199	phenylalanine-tRNA
42	53	27.5	267 1 UJCH	major prion protei
43	53	27.5	267 2 A37372	prion protein homo
44	53	27.5	273 2 A46280	prion protein - ch
45	53	27.5	346 2 B71496	tryptophan-tRNA 11

ALIGNMENTS

RESULT 1
A53892
prion-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C/Accession: A53892
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A/Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:2889848
A/Accession: A53892
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-226 <LIA>
A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major prion protein

Query Match 100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 4e-16;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTKGKNTFTDVKMMER 36
Db 145 NNFVHDCVNITIKQHTVTTTKGKNTFTDVKMMER 180

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71041; S51630
R/Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437
R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53630
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 157 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 192

RESULT 3

S71048

major prion protein - Callicebus moloch (fragment)
C/Species: Callicebus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71048; S53632
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:94755

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 166 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 201

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx (Mandrillus sphinx)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71056; S53621
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:94743

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36

Db 166 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 201

RESULT 5

S53627

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S53627; S71043
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 165 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 200

RESULT 6

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71045; S53628
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:9474342; PIDN:AAC50081.1; PID:9474342

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 8-10, 'V', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 165 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 200

RESULT 7

S53634


```

major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53634
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  NNFVHDCVNITIKOHTVTTTGGENFETEDVKMMER 36
Db      172  NNFVHDCVNITIKOHTVTTTGGENFETEDVKMMER 207

RESULT 8
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53631
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  NNFVHDCVNITIKOHTVTTTGGENFETEDVKMMER 36
Db      172  NNFVHDCVNITIKOHTVTTTGGENFETEDVKMMER 207

RESULT 9
major prion protein precursor - human
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A24117; A40392; A05011; S14078; I54322; I68597; I58135; I59184; I79633; I79597

```

A:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A>Title: Molecular cloning of a human prion protein cDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <KRE>
A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A>Title: Genomic structure of the human prion protein gene.
A:Reference number: A40372; MUID:91328137; PMID:1678248
A:Accession: A40372
A>Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80,89-253 <PUC>
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
R:Tagliavini, F.; Pretelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A>Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72,'X',74-76,'XX',79,'XXX',83-86,111-128,'V',130-150 <TAG>
R:Didrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: 154322; MUID:93250789; PMID:1363802
A:Accession: 154322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: 168597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RE3>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Shigemata, W.; I
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:92140671; PMID:1736177
A:Accession: 158135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGG' <RE2>
A:Cross-references: GB:S80537; NID:g244698; PIDN:AAB2133.1; PID:g244699
R:Goldfieb, L.G.; Brown, P.; McComb, W.R.; Goldfieb, D.; Swergold, G.D.; Wille, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, ar
A:Accession: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID
C:Genetics:
A:Gene: GDB:PRNP; CUD: PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-230/Product: major prion protein #status predicted <MAT>
 F:154-92/Region: 8-residue repeats (P-H-G-G-W-G-O)
 F:1231-253/Domain: carboxyl-terminal propenylid #status predicted <CTP>
 F:1179-214/Disulfide bonds: #status predicted
 F:181,197/Binding site: carbohydrate (Aen) (covalent) #status predicted
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 10

S53624
 major prion protein - stump-tailed macaque
 C:Species: Macaca arctoides (stump-tailed macaque)
 C:Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S53624; S71051
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53624
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:U08311
 R:Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71051
 A:Molecule type: DNA
 A:Residues: 1-210 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS0099.1; PID:9475584
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 11

S53623
 major prion protein - crab-eating macaque
 C:Species: Macaca fascicularis (crab-eating macaque)
 C:Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S53623; S71052
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53623
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:U08298
 R:Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71052
 A:Molecule type: DNA
 A:Residues: 1-210 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 12

S53620
 major prion protein - hamadryas baboon
 C:Species: Papio hamadryas (hamadryas baboon)
 C:Date: 28-Oct-1996 #sequence _revision 07-Feb-1997 #text_change 11-Aug-2003
 C:Accession: S53620; S71058
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53620
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:U08294
 R:Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71058
 A:Molecule type: DNA
 A:Residues: 1-210 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 13

S53625
 major prion protein - Japanese macaque
 C:Species: Macaca fuscata (Japanese macaque)
 C:Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S53625; S71053
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53625
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: UNIPROT:P40254; EMBL:U08301
 R:Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71053
 A:Molecule type: DNA
 A:Residues: 1-210 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
|||
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C/Species: Macaca mulatta (rhesus macaque)

C/Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C/Accession: 184423; S53622; S71054

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 184423

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40254; EMBL:U5163; NID:9595850; PIDN:AAA68635.1; PID:95958

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139056; PMID:7837269

A/Accession: S53622

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-210,'R',212-253 <SCH>

A/Cross-references: EMBL:U08307

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
|||
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C/Species: Macaca nemestrina (pig-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71055; S53626

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71055

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53626

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-210,'R',212-247 <SCM>

A/Cross-references: EMBL:U08306

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
|||
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:38

Job time : 11.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTTTTGTGKENTFTDVKKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: uniprot_sprotc:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	193	100.0	232 1	P40246 atelae geof
2	193	100.0	238 1	P40246 atelae geof
3	193	100.0	238 1	P40246 atelae geof
4	193	100.0	238 2	P40246 atelae geof
5	193	100.0	240 2	P40246 atelae geof
6	193	100.0	241 1	P40246 atelae geof
7	193	100.0	241 1	P40246 atelae geof
8	193	100.0	245 1	P40246 atelae geof
9	193	100.0	246 1	P40246 atelae geof
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12	193	100.0	246 1	P40246 atelae geof
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14	193	100.0	248 2	P40246 atelae geof
15	193	100.0	252 1	P40246 atelae geof
16	193	100.0	252 1	P40246 atelae geof
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24	193	100.0	253 1	P40246 atelae geof
25	193	100.0	253 1	P40246 atelae geof
26	193	100.0	253 2	P40246 atelae geof
27	193	100.0	253 2	P40246 atelae geof
28	193	100.0	253 2	P40246 atelae geof
29	193	100.0	253 2	P40246 atelae geof
30	193	100.0	253 2	P40246 atelae geof
31	193	100.0	254 1	P40246 atelae geof

32	193	100.0	254 1	P40246 atelae geof
33	193	100.0	254 1	P40246 atelae geof
34	193	100.0	254 1	P40246 atelae geof
35	193	100.0	254 1	P40246 atelae geof
36	193	100.0	254 2	P40246 atelae geof
37	193	100.0	254 2	P40246 atelae geof
38	193	100.0	254 2	P40246 atelae geof
39	193	100.0	254 2	P40246 atelae geof
40	193	100.0	254 2	P40246 atelae geof
41	193	100.0	254 2	P40246 atelae geof
42	193	100.0	254 2	P40246 atelae geof
43	193	100.0	254 2	P40246 atelae geof
44	193	100.0	254 2	P40246 atelae geof
45	193	100.0	254 2	P40246 atelae geof

ALIGNMENTS

RESULT 1	ID	P40246	STANDARD	PRT	232 AA
AC	P40246				
DT	01-FEB-1995 (Rel. 31, Created)				
DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	05-JUL-2004 (Rel. 44, Last annotation update)				
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).				
GN	Name=PRP;				
OS	Ateles Geoffroyi (Black-handed spider monkey).				
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.				
OX	NCBI_TaxID=9509;				
RN	(1)				
RP	SEQUENCE FROM N.A.				
RA	MDL:95139066; PubMed:7837269;				
RA	Schaezel H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;				
RT	"Prion protein gene variation among primates."				
RL	J. Mol. Biol. 245:362-374(1995).				
CC	- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.				
CC	- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".				
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.				
CC	- SIMILARITY: Belongs to the prion family.				
CC	-----				
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.ebi.ac.uk/announcements or send an email to license@ebi.ac.uk).				
CC	-----				
DR	EMBL; U08309; AAC50097.1; -				
DR	PIR; S71041; S71041.				
DR	HSP; P23907; 1G04.				
DR	InterPro; IPR00817; Prion.				
DR	Pfam; PF00377; Prion; 1.				
DR	Pfam; PF03991; Prion; 1.				
DR	PRINTS; PR00341; PRION.				
DR	PROSITE; PS00291; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
DR	GlycoProtein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.				
FT	NON_TER				
FT	SIGNAL				
FT	CHAIN				
FT	PROPEP				
FT	LIPID				

```

FT FT DISULFID 163 198 similarity).
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 N-linked (GlcNAc... ) (Potential).
FT REPEAT 44 51 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 52 59 0.
FT REPEAT 59 67 1.
FT REPEAT 67 75 2.
FT NON_TER 232 232 3.
SQ SEQUENCE 232 AA, 25596 MW, 0E2D75F04C05CC4A CRC64;

Query Match
Best Local Similarity 100.0%; Score 193; DB 1; Length 232;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 192

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OC Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion octapep; 5.
CC PRINTS; PR00341; PRION_1; 1.
CC PROSITE; PS00291; Prion octapep; 5.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

```

```

FT FT NON_TER 1 1 By similarity.
FT SIGNAL <1 15 Major prion protein.
FT CHAIN 16 215 Removed in mature form (By similarity).
FT PROPEP 216 238 GPI-anchor amidated serine (By
FT LIPID 215 215 similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc... ) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA, 26123 MW, 5F59A3B8C3E3531B CRC64;

Query Match
Best Local Similarity 100.0%; Score 193; DB 1; Length 238;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 193

RESULT 3
PRIO_THEGE STANDARD; PRT; 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PrP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_TaxID=9565;
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion octapep; 5.
CC PRINTS; PR00341; PRION_1; 1.
CC PROSITE; PS00291; Prion octapep; 5.

```

```

DR PROSITE: PS00706; PRION_2; 1
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 Q.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT NON_TER 238 238 4.
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 193

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 193; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 193

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4;

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DT 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OC NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 100.0%; Score 193; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 5.4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
DB 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 200

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callithecus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
OC Callithecus.
OC NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-95139066; PubMed-7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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EMBL; U08312; AAC50100.1; -
 PIR; S71048; S71048.
 HSSP; P23907; IG04.
 InterPro; IPR000817; Prion.
 Pfam; PF00377; Prion; 1.
 Pfam; PF03991; Prion; 1.
 PRINTS; PR00341; Prion.
 PROSITE; PS00291; PRION_1; 1.
 PROSITE; PS00706; PRION_2; 1.
 Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 Signal.
 NON_TER
 SIGNAL
 CHAIN
 PROPEP
 DISULFID
 LIPID
 CARBOHYD
 CARBOHYD
 DOMAIN
 REPEAT
 REPEAT
 REPEAT
 REPEAT
 REPEAT
 NON_TER
 SEQUENCE

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNTTKKHTVTTTGGNFETTDVKMER 36
 166 NNFVHDCVNTTKKHTVTTTGGNFETTDVKMER 201

RESULT 7
 ID PRIO_MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillus.
 OX NCBI_TaxID=5561;
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC DISASS: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

transmissible mink encephalopathy (TME), etc.
 -1- SIMILARITY: Belongs to the prion family.

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EMBL; U08303; AAC50091.1; -
 PIR; S71056; S71056.
 HSSP; P23907; IG04.
 InterPro; IPR000817; Prion.
 Pfam; PF00377; Prion; 1.
 Pfam; PF03991; Prion; 1.
 PRINTS; PR00341; Prion.
 PROSITE; PS00291; PRION_1; 1.
 PROSITE; PS00706; PRION_2; 1.
 Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 NON_TER
 SIGNAL
 CHAIN
 PROPEP
 DISULFID
 LIPID
 CARBOHYD
 CARBOHYD
 DOMAIN
 REPEAT
 REPEAT
 REPEAT
 REPEAT
 REPEAT
 NON_TER
 SEQUENCE

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNTTKKHTVTTTGGNFETTDVKMER 36
 166 NNFVHDCVNTTKKHTVTTTGGNFETTDVKMER 201

RESULT 8
 ID PRIO_CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 GN Name=PrNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Cercopithecus.
 OX NCBI_TaxID=5534; 36224;
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called


```

CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyrighted. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL, U08291; AAC50080.1; -.
CC      EMBL, U08292; AAC50081.1; -.
CC      PIR, S53627; S53627.
CC      PIR, S71045; S71045.
CC      HSSP, P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam, PF00377; Prion, 1.
CC      Pfam, PF03991; Prion, octapep, 5.
CC      PRINTS, PR00341; PRION.
CC      PROSITE, PS00291; PRION_1; 1.
CC      PROSITE, PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT SIGNAL 1 222 By similarity.
CC      FT CHAIN 23 222 Major prion protein.
CC      FT PROPEP 223 245 Removed in mature form (By similarity).
CC      FT LIPID 222 222 GPI-anchor amidated serine (By
CC      similarity).
CC      FT DISULFID 171 206 By similarity.
CC      FT CARBOHYD 173 173 N-linked (GlcNAc... ) (Potential).
CC      FT CARBOHYD 189 189 N-linked (GlcNAc... ) (Potential).
CC      FT DOMAIN 51 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-
CC      FT REPEAT 51 59 0.
CC      FT REPEAT 60 67 1.
CC      FT REPEAT 68 75 2.
CC      FT REPEAT 76 83 3.
CC      FT REPEAT 77 84 4.
CC      SQ SEQUENCE 245 AA; 26885 MW; D582B582726C99A CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 245;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 36
CC      Db 165 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 200

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyrighted. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL, U75386; AAB50625.1; -.
CC      HSSP, P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam, PF00377; Prion, 1.
CC      Pfam, PF03991; Prion, octapep, 6.
CC      PRINTS, PR00341; PRION.
CC      PROSITE, PS00291; PRION_1; 1.
CC      PROSITE, PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT SIGNAL 1 15 By similarity.
CC      FT CHAIN 16 223 Major prion protein.
CC      FT PROPEP 224 246 Removed in mature form (By similarity).
CC      FT LIPID 223 223 GPI-anchor amidated serine (By
CC      similarity).
CC      FT DISULFID 172 207 By similarity.
CC      FT CARBOHYD 174 174 N-linked (GlcNAc... ) (Potential).
CC      FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
CC      FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC      FT REPEAT 44 52 0.
CC      FT REPEAT 53 60 1.
CC      FT REPEAT 61 68 2.
CC      FT REPEAT 69 76 3.
CC      FT REPEAT 77 84 4.
CC      SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 246;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 36
CC      Db 166 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 201

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RESULT 9
PRIO CERMO STANDARD; PRT; 246 AA.
AC P61761; O95172; O95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion.";

```

```

RESULT 10
PRIO CERNE STANDARD; PRT; 246 AA.
AC P61762; O95172; O95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC Animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75387; AAB50626.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion, 1.
 CC PRINTS: PR00391; Prion, octapep, 6.
 CC PROSITE: PS00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 36
 CC 166 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 201
 CC
 CC RESULT 11
 CC PRIO_CERTO STANDARD; PRT; 246 AA.
 CC AC 095176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecinae; Cercopithecus.

OK NCBI_TaxID=9531;
 RN [1]
 RA SEQUENCE FROM N.A.
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC Animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75385; AAB50628.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion, 1.
 CC PRINTS: PR00391; Prion, octapep, 6.
 CC PROSITE: PS00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SEQUENCE 246 AA; 26914 MW; F58679CBEC5AD7 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 36
 CC 166 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 201
 CC
 CC RESULT 12
 CC PRIO_BRYPA STANDARD; PRT; 246 AA.
 CC AC 095174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Erythrocebus.
 CC NCBI_TaxID=9538;
 CC [1]
 CC SEQUENCE FROM N.A.
 CC van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RA "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.ebi.ac.uk/announcements>
 CC or send an email to license@ebi.ac.uk).
 CC -----
 CC DR EMBL: U75388; AAB50627.1; -;
 CC DR HSSP: P23907; 1G04.
 CC DR InterPro: IPR000817; Prion.
 CC DR Pfam: PF00377; Prion; 1.
 CC DR Pfam: PF03991; Prion octapep; 6.
 CC DR PRINTS: PR00341; PRION.
 CC DR PROSITE: PS00291; PRION_1; 1.
 CC DR PROSITE: PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL 1 15
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 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
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 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 CC 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
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 CC 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 201
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 CC RESULT 13
 CC ID AAO83636 PRELIMINARY; PRT; 246 AA.
 CC AC AAO83636;
 CC DT 02-MAR-2004 (TREMBlrel. 27, Created)
 CC DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
 CC DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 CC NCBI_TaxID=9606;
 CC [1]
 CC SEQUENCE FROM N.A.
 CC Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RA "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC EMBL: AY219883; AAO83636.1; -;
 CC Prion.
 CC FT NON_TER 1 1
 CC FT NON_TER 246 246
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 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 CC |||||
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 CC RESULT 14
 CC ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 CC AC Q8VHV5;
 CC DT 01-MAR-2002 (TREMBlrel. 20, Created)
 CC DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 CC DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 CC DE Prion protein (Fragment).
 CC GN Name=PrP;
 CC OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC OC Clethrionomys.
 CC FT NON_TER 1 1
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC FT REPEAT 84 84
 CC SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
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 CC Best Local Similarity 100.0%; Pred. No. 5.6e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 CC |||||
 CC 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 208
 CC |||||
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 CC RESULT 15
 CC ID PRIO_CALJA STANDARD; PRT; 252 AA.
 CC AC P40247;
 CC DT 01-FEB-1995 (Rel. 31, Created)
 CC DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUL-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrP;
OS Calithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euteria; Primates; Platyrrhini; Callitrichidae; Callithrix.
OX NCBI_Taxid:9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE:95139066; PubMed:7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U08304; AAC50092.1; --
DR PIR: S53634; S53634.
DR HSSP: P23907; 1G04.
DR InterPro: IPR00817; Prion.
DR Pfam: PF03991; Prion; 1.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 1 229
FT PROPEP 23 229
FT LIPID 229 229
FT DISULFD 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 58
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FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FDC664 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5,7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NNFVHDCVNTITKQHTVTTTGGNFTETDYKMER 36
Db 172 NNFVHDCVNTITKQHTVTTTGGNFTETDYKMER 207

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Search completed: December 3, 2004, 00:35:28
 Job time: 59.1902 secs

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Parent AA:*

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- 2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
- 3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
- 4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
- 5: /cgn2_6/ptodata/1/1aa/PCTUS.COMB.pep.*
- 6: /cgn2_6/ptodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10
2	193	100.0	245	4	US-09-431-887-5
3	193	100.0	245	4	US-09-431-887-15
4	193	100.0	252	4	US-09-431-887-13
5	193	100.0	252	4	US-09-431-887-17
6	193	100.0	253	1	US-08-242-188-2
7	193	100.0	253	1	US-08-509-261A-2
8	193	100.0	253	1	US-08-660-626-8
9	193	100.0	253	1	US-08-692-892-2
10	193	100.0	253	2	US-08-713-939A-2
11	193	100.0	253	2	US-08-868-162A-22
12	193	100.0	253	3	US-09-031-168-8
13	193	100.0	253	3	US-09-128-450-10
14	193	100.0	253	3	US-09-036-579-2
15	193	100.0	253	3	US-09-823-494-20
16	193	100.0	253	3	US-09-550-374-2
17	193	100.0	253	4	US-09-431-887-1
18	193	100.0	253	4	US-09-431-887-2
19	193	100.0	253	4	US-09-431-887-3
20	193	100.0	253	4	US-09-431-887-4
21	193	100.0	253	4	US-09-431-887-7
22	193	100.0	253	4	US-09-431-887-8
23	193	100.0	253	4	US-09-431-887-9
24	193	100.0	253	4	US-09-431-887-10
25	193	100.0	253	4	US-09-431-887-11
26	193	100.0	253	4	US-09-431-887-12
27	193	100.0	253	4	US-09-431-887-14

28	193	100.0	253	4	US-09-431-887-16	Sequence 16, Appl
29	193	100.0	253	4	US-09-431-887-18	Sequence 18, Appl
30	193	100.0	253	4	US-09-431-887-19	Sequence 19, Appl
31	193	100.0	253	4	US-09-943-906-2	Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8	Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57	Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72	Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3	Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1	Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1	Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7	Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1	Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1	Sequence 1, Appl
41	193	100.0	254	2	US-08-868-162A-21	Sequence 21, Appl
42	193	100.0	254	3	US-09-031-168-7	Sequence 7, Appl
43	193	100.0	254	3	US-09-128-450-19	Sequence 19, Appl
44	193	100.0	254	3	US-09-128-450-28	Sequence 28, Appl
45	193	100.0	254	3	US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESSES:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
FAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 84 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 119

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RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match
Best Local Similarity 100.0%; Score 193; DB 4; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 200

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match
Best Local Similarity 100.0%; Score 193; DB 4; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 200

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-13

Query Match
Best Local Similarity 100.0%; Score 193; DB 4; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 200
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; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match
Best Local Similarity 100.0%; Score 193; DB 4; Length 252;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 207

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match
Best Local Similarity 100.0%; Score 193; DB 4; Length 252;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 207

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESS: Karl Bosicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
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FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5783655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/0868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneo, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSER: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

Query 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
|||||
|||||

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suetete
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

Query 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
|||||
|||||

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Button, Dennis R.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match

Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 36
DB 173 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 208

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match

Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 36
DB 173 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 208

Search completed: December 3, 2004, 00:18:55
Job time : 14.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITKQHTVTTTGTGENTETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
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9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
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15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed.
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	193	100.0	117	14	US-10-050-902-348
2	193	100.0	117	14	US-10-050-902-348
3	193	100.0	117	14	US-10-050-902-348
4	193	100.0	117	14	US-10-050-902-348
5	193	100.0	124	14	US-10-050-902-324
6	193	100.0	124	14	US-10-050-902-324
7	193	100.0	124	14	US-10-050-902-324
8	193	100.0	124	14	US-10-050-902-324
9	193	100.0	124	14	US-10-050-902-324
10	193	100.0	124	14	US-10-050-902-324
11	193	100.0	124	14	US-10-050-902-324
12	193	100.0	124	14	US-10-050-902-324
13	193	100.0	124	14	US-10-050-902-324

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	15	US-10-301-488A-75	Sequence 25, Appl1
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	193	100.0	226	14	US-10-205-194-121	Sequence 12, Appl
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 2

US-10-050-898-348
 ; Sequence 348, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tisbec, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Sebbel, Peter
 ; APPLICANT: Plosssek, Christine
 ; APPLICANT: Ortman, Rainer
 ; APPLICANT: Luond, Rainer
 ; APPLICANT: Steudendiel, Matthias
 ; APPLICANT: Frey, Peter
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190005
 ; CURRENT APPLICATION NUMBER: US/10/050,898
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 348
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified human prion protein fragment
 ; US-10-050-898-348

Query Match

Best Local Similarity 100.0%; Score 193; DB 14; Length 117;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 3

US-10-346-190-89
 ; Sequence 89, Application US/10346190
 ; Publication No. US20030219459A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Pelliccioli, Erica
 ; APPLICANT: Renner, Wolfgang A.
 ; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
 ; FILE REFERENCE: 1700.0290003
 ; CURRENT APPLICATION NUMBER: US/10/346,190
 ; PRIOR FILING DATE: 2003-01-17
 ; PRIOR APPLICATION NUMBER: 60/396,590
 ; PRIOR FILING DATE: 2002-07-18
 ; PRIOR APPLICATION NUMBER: 60/393,725
 ; PRIOR FILING DATE: 2002-07-08
 ; PRIOR APPLICATION NUMBER: 60/389,898
 ; PRIOR FILING DATE: 2002-06-20

;; PRIOR APPLICATION NUMBER: PCT/IB02/00166
 ; PRIOR FILING DATE: 2002-01-21
 ; PRIOR APPLICATION NUMBER: 10/050,902
 ; PRIOR FILING DATE: 2002-01-18
 ; NUMBER OF SEQ ID NOS: 164
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 89
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified Human Prion Protein Fragment
 ; US-10-346-190-89

Query Match

Best Local Similarity 100.0%; Score 193; DB 14; Length 117;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 4

US-10-050-902-324
 ; Sequence 324, Application US/10050902
 ; Publication No. US20030175290A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tisbec, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Sebbel, Peter
 ; APPLICANT: Plosssek, Christine
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190004
 ; CURRENT APPLICATION NUMBER: US/10/050,902
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 324
 ; LENGTH: 124
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: mPrPc construct
 ; US-10-050-902-324

Query Match

Best Local Similarity 100.0%; Score 193; DB 14; Length 124;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 88

RESULT 5

US-10-050-898-324
 ; Sequence 324, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
DB 53 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pricn Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/336,550
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
DB 53 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luhrs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
DB 84 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
DB 82 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105

```

; CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2013
; LENGTH: 163
; TYPE: PRS
; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 163;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: P-P2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRS
; ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 193; DB 9; Length 164;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRS
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 200;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36

US-10-031-975-1_copy_179_214.rapb

; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRS
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Raetz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Schaefer, Werner
; TITLE OF INVENTION: Complexes comprising a prion protein and peptide [Prolyl isomerase]
; FILE REFERENCE: 12290 US (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRS
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 193; DB 17; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 186

RESULT 14
```

US-10-470-848-6
 ; Sequence 6, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848
 ; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 6
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
 US-10-470-848-6

Query Match 100.0%; Score 193; DB 16; Length 209;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 |||||
 Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

RESULT 15
 US-10-470-848-7
 ; Sequence 7, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848
 ; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 7
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
 US-10-470-848-7

Query Match 100.0%; Score 193; DB 16; Length 209;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 |||||
 Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

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 Job time : 42.6098 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: us-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITTKQHTTTTKEGFTEDVKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 35872929 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_23Sep04:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	ABG94357	ABG94357 Modified
2	211	100.0	117	ABG80669	ABG80669 Human pri
3	211	100.0	117	ADD24196	ADD24196 Modified
4	211	100.0	124	ABG94340	ABG94340 Mouse mpr
5	211	100.0	124	ABG80652	ABG80652 Mouse tru
6	211	100.0	124	ADD24200	ADD24200 mpr-pr-BK-
7	211	100.0	142	AAW17686	AAW17686 Prion pro
8	211	100.0	163	ADB63859	ADB63859 Human pro
9	211	100.0	200	ABG31907	ABG31907 Human pri
10	211	100.0	208	ABG7316	ABG7316 Mouse pri
11	211	100.0	208	AAW07318	AAW07318 Human pri
12	211	100.0	208	AAW07327	AAW07327 Mouse pri
13	211	100.0	208	AAW07329	AAW07329 Human pri
14	211	100.0	208	ABG31902	ABG31902 Human pri
15	211	100.0	208	ABG31904	ABG31904 Chimera-t
16	211	100.0	208	ADJ66133	ADJ66133 Mouse pri
17	211	100.0	209	ABG31905	ABG31905 HCNV type
18	211	100.0	211	AAW30801	AAW30801 Amno aci
19	211	100.0	225	ABR42793	ABR42793 Rat prion
20	211	100.0	226	ADB85240	ADB85240 Monkey pr
21	211	100.0	245	AAW72342	AAW72342 Cercopit
22	211	100.0	245	AAW72352	AAW72352 Cercopit
23	211	100.0	253	AAW86715	AAW86715 Human pri
24	211	100.0	253	AAW69660	AAW69660 Human pri
25	211	100.0	253	AAW85901	AAW85901 Human pri

26	211	100.0	253	AAW07994	AAW07994 Human pri
27	211	100.0	253	AAW81485	AAW81485 Human pri
28	211	100.0	253	AAW06272	AAW06272 Human pri
29	211	100.0	253	AAW15035	AAW15035 Human pri
30	211	100.0	253	AAW72339	AAW72339 Chimpanze
31	211	100.0	253	AAW72347	AAW72347 Prion pro
32	211	100.0	253	AAW72353	AAW72353 Guereza p
33	211	100.0	253	AAW72344	AAW72344 Rhesus mo
34	211	100.0	253	AAW72345	AAW72345 Gibbon pr
35	211	100.0	253	AAW72350	AAW72350 Marmoset
36	211	100.0	253	AAW72351	AAW72351 Hamadryas
37	211	100.0	253	AAW72348	AAW72348 Prion pro
38	211	100.0	253	AAW72356	AAW72356 Siamaing p
39	211	100.0	253	AAW72346	AAW72346 Prion pro
40	211	100.0	253	AAW72355	AAW72355 Prion pro
41	211	100.0	253	AAW72349	AAW72349 Prion pro
42	211	100.0	253	AAW72340	AAW72340 Orangutan
43	211	100.0	253	AAW72338	AAW72338 Human pri
44	211	100.0	253	AAW72354	AAW72354 Capuchin
45	211	100.0	253	AAW72341	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.

XX ABG94357;

XX 10-DEC-2002 (first entry)

DE "Modified human prion protein fragment.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;

KW vaccine; infectious disease.

XX Homo sapiens.

XX WO200256905-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002MO-IB000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;

XX Ploessek C;

XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious

XX diseases.

XX Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array

XX used in the production of vaccines for infectious diseases. The invention

XX also discloses a composition comprising a non-natural molecular scaffold

XX comprising a core particle selected from a core particle of a non-natural

XX origin and a core particle of natural origin and an organiser comprising

XX at least one first attachment site, where the organiser is connected to

XX the core particle by at least one covalent bond. Also disclosed is an

XX antigen or antigenic determinant with at least one second attachment

XX site, where the antigen or antigenic determinant is amyloid beta peptide

(Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the second attachment site interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant Qbeta coat proteins fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, CC antiviral, antidiabetic, or hypoglycemic activities and may be used in CC immunisation and as a vaccine. The present sequence represents a protein CC sequence used to create the compositions of the invention

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
DB 52 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 91

RESULT 2

ABG80669 ID ABG80669 standard; protein; 117 AA.
XX AC ABG80669;
XX DT 29-NOV-2002 (first entry)

XX XX Human prion protein/cysteine-containing peptide fusion protein.
XX XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
XX XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mulein;
XX XX adult versus host disease; Ige-mediated allergic reaction; anaphylaxis;
XX XX allergic asthma; acute lymphoblastic leukemia; Crohn's disease;
XX XX Grave's disease; systemic lupus erythematosus; osteoporosis;
XX XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
XX XX immunoproliferative disease lymphadenopathy; Alzheimer's disease;
XX XX angioimmunoproliferative lymphadenopathy; infectious disease;
XX XX rheumatoid arthritis; diabetes; infectious disease; factor Xa;
XX XX enterokinase; cysteine-containing linker.

OS Homo sapiens.
OS Synthetic.
XX XX WO200256907-A2.
XX XX 25-JUL-2002.
XX XX 21-JAN-2002; 2002WO-IB000168.
XX XX 19-JAN-2001; 2001US-0262379P.
XX XX 04-MAY-2001; 2001US-0288549P.
XX XX 05-OCT-2001; 2001US-0326998P.
XX XX 07-NOV-2001; 2001US-0331045P.
XX XX (CYTO-) CYTOS BIORECHNOLOGY AG.
XX XX (NOVS) NOVARTIS PHARMA AG.
XX XX (MAUR) MAURER P.
XX XX (LECH) LECHNER F.
XX XX (ORTM) ORTMANN R.
XX XX (LUBO) LUBOEND R.
XX XX (STAU) STAUFENBIEL M.
XX XX (FREY) FREY P.

PI Maurer P, Lechner F, Ortmann R, Luboend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisot A, Sebbel P, Plosek C;
XX DR WPI; 2002-636514/68.
XX XX
XX XX Molecular antigen array used in the production of vaccines for infectious
XX XX diseases.
XX XX
XX XX Disclosure; Page 418; 418pp; English.

XX XX The invention relates to a composition comprising: (a) a non-natural
XX XX molecular scaffold comprising: (1) a core particle selected from: (1) a
XX XX core particle of a non-natural origin; and (2) a core particle of natural
XX XX origin; and (11) an antigen or antigenic determinant, where the antigen or
XX XX site, where the antigen is connected to the core particle by at least
XX XX one second attachment site, where the antigen or antigenic determinant is
XX XX attached to the core particle by at least one second attachment site; and
XX XX where the antigen or antigenic determinant is attached to the core particle
XX XX through at least one non-peptide bond to the first attachment site; and
XX XX where the antigen or antigenic determinant and the scaffold interact
XX XX through the association to form an ordered and repetitive antigen array.
XX XX Also included is a process for producing a non-naturally occurring
XX XX immunisation and as a vaccine for diseases such as influenza, graft
XX XX versus host disease, Ige-mediated allergic reactions, anaphylaxis, adult
XX XX acute lymphoblastic leukemia, Crohn's disease, allergic asthma,
XX XX systemic lupus erythematosus, non-Hodgkin's lymphoma, Grave's disease,
XX XX angioimmunoproliferative disease lymphadenopathy, myasthenia
XX XX gravis, immunoproliferative disease lymphadenopathy, multiple sclerosis,
XX XX rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
XX XX osteoporosis and infectious diseases. The present sequence is a modified
XX XX antigen for use in the array of the invention. The antigen is modified to
XX XX possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
XX XX containing N- or C-terminal linker peptide which serves as the attachment
XX XX point to a virus like particle or bacterial protein (the scaffold
XX XX protein)

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
DB 52 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 91

RESULT 3

ADD24196 ID ADD24196 standard; protein; 117 AA.
XX XX
XX XX ADD24196;
XX XX 15-JAN-2004 (first entry)

XX XX Modified human prion protein amino acid sequence.
XX XX vaccine composition; virus-like particle; core particle;
XX XX first attachment site; antigen; antigenic determinant; prion protein;
XX XX PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
XX XX prion disease; Bovine Spongiform Encephalopathy; BSE;
XX XX Creutzfeldt-Jakob Disease; prion; mutant; mulein.

OS Synthetic.
OS prion.
XX XX
XX XX WO2003059386-A2.

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003MO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQ 40
 DB 52 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN MO20256905-A2.
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002MO-IB000166.
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326989P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Piossek C;
 XX
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β subunit coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytoskeletal,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQ 40
 DB 53 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutein;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; AIDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Luegend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosek C,
 XX WPI: 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS
 XX Example 7; Page 415; 418pp; English.
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; (c) a fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the antigen or antigenic
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunization and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC systemic lupus erythematosus, non-Hodgkin's lymphoma, Grave's disease,
 CC graft-versus-host disease, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (antigenase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
 DB 53 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 92

RESULT 6
 ID ADD24200
 XX ADD24200 standard; protein; 124 AA.
 AC
 XX ADD24200;
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrPt-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 OS
 XX
 XX WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 PI WPI: 2003-598483/56.
 DR
 XX
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
 DB 53 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 92
 RESULT 7
 AAAM17686
 ID AAAM17686 standard; peptide; 142 AA.
 XX
 AC AAAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jacob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX Gerstmann-Strausler-Scheinker disease; hamster; human.
 OS Homo sapiens.
 XX
 PN MO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96MO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS
 XX Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jacob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 SQ Sequence 142 AA;
 XX
 Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTRO20055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S,
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Itie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS
 XX Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 SQ Sequence 163 AA;
 XX
 Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002WO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO ) UNIV TOHOKU.
XX
XX Kitanoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention.
XX
XX Sequence 200 AA;
SQ
Query Match 100.0%; Score 211; DB 5; Length 200;
Best Local Similarity 100.0%; Pred. No. 2.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY
1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 143 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 182
RESULT 10
AAB07316
ID AAB07316 standard; protein; 208 AA.
AC
XX AAB07316;
XX
XX 17-OCT-2000 (first entry)
XX
XX Mouse prion protein sequence.
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond 158..191
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX
XX

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
SQ
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY
1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 150 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 189
RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA.
AC
XX AAB07318;
XX
XX 17-OCT-2000 (first entry)
XX
XX Human prion protein sequence.
XX
XX Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Region 29..69
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond 157..192
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of
XX

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transmissible spongiform encephalopathies in bovines.
 Disclosure; Page 43-44; 50pp; English.
 The present sequence is the human prion protein (PrP) sequence.
 Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
 ID AAB07327 standard; protein; 208 AA.
 AAB07327;
 17-OCT-2000 (first entry)
 Mouse prion protein sequence.
 Mouse; prion protein; transmissible spongiform encephalopathy;
 bovine spongiform encephalopathy; TSE diagnosis; PrP.
 Mus sp.
 Key Location/Qualifiers
 Region /note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
 Disulfide-bond 156..191
 Modified-site 208
 /note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"
 WO200029849-A1.
 25-MAY-2000.
 27-OCT-1999; 99WO-FI000896.
 17-NOV-1998; 98FI-00002480.
 (WALL-) WALLAC OY.
 (BBSR-) BBSRC OFFICE.
 Hope J, Barnard GJR, Birkett CR;
 WPI; 2000-399778/34.
 New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.
 Disclosure; Page 41-42; 50pp; English.
 The present sequence is the mouse prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
 ID AAB07329 standard; protein; 208 AA.
 AAB07329;
 17-OCT-2000 (first entry)
 Human prion protein sequence.
 Human; prion protein; transmissible spongiform encephalopathy;
 bovine spongiform encephalopathy; TSE diagnosis; PrP.
 Homo sapiens.
 Key Location/Qualifiers
 Region /note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
 Disulfide-bond 157..192
 Modified-site 208
 /note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"
 WO200029849-A1.
 25-MAY-2000.
 27-OCT-1999; 99WO-FI000896.
 17-NOV-1998; 98FI-00002480.
 (WALL-) WALLAC OY.
 (BBSR-) BBSRC OFFICE.
 Hope J, Barnard GJR, Birkett CR;
 WPI; 2000-399778/34.
 New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.
 Disclosure; Page 43-44; 50pp; English.
 The present sequence is the human prion protein (PrP) sequence.
 Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 40
 DB 151 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 190

RESULT 14

ABG31902
 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;

KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN WO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 40
 DB 151 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 190

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimeric-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN WO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX
 SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 40
 DB 151 NNFVHDCVNTTIKQHTVTTTGGNFETETDVGMERVVEQ 190

Search completed: December 3, 2004, 00:55:36
 Job time : 67.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	226	2 A53892	prion-related prot
2	211	100.0	232	2 S71041	major prion protei
3	211	100.0	241	2 S71048	major prion protei
4	211	100.0	241	2 S71056	major prion protei
5	211	100.0	245	2 S71045	major prion protei
6	211	100.0	253	1 UYHU	major prion protei
7	211	100.0	253	1 I84423	major prion protei
8	211	100.0	253	2 S71055	major prion protei
9	211	100.0	253	2 S53635	prion protein - si
10	211	100.0	253	2 I37032	major prion protei
11	211	100.0	253	2 I61847	major prion protei
12	211	100.0	254	2 B34759	prion protein - ch
13	211	100.0	254	2 A34759	prion protein - ch
14	211	100.0	254	2 A23544	major prion protei
15	210	99.5	252	2 I18188	major prion protei
16	209	99.1	264	2 S71137	prion protein - gr
17	206	97.6	245	2 S53627	major prion protei
18	206	97.6	252	2 S53634	major prion protei
19	206	97.6	252	2 S53631	major prion protei
20	206	97.6	253	2 S53624	major prion protei
21	206	97.6	253	2 S53623	major prion protei
22	206	97.6	253	2 S53620	major prion protei
23	206	97.6	253	2 S53625	major prion protei
24	206	97.6	253	2 S53617	major prion protei
25	206	97.6	253	2 S53614	major prion protei
26	206	97.6	253	2 S53616	major prion protei
27	206	97.6	253	2 S53618	major prion protei
28	206	97.6	253	2 S53619	major prion protei
29	206	97.6	254	1 UHYIYH	major prion prp-Sc

30	206	97.6	256	2 JU0268	major prion protei
31	206	97.6	257	2 A23545	major prion prp27-
32	206	97.6	264	2 A54330	major prion protei
33	205	97.2	256	2 S37149	prion protein - go
34	205	97.2	256	2 A54281	major prion protei
35	205	97.2	260	2 S53629	major prion protei
36	203	96.2	257	2 JU1900	major prion protei
37	202	95.7	239	2 S53633	major prion protei
38	200	94.8	252	2 JG6175	prion protein - ra
39	61	28.9	267	1 UCH	major prion protei
40	61	28.9	267	2 A37372	prion protein homo
41	61	28.9	273	2 A46280	prion protein - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amyloidulianase (
44	56	26.5	511	2 C69199	phenylalanine-cRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1

A53892

prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889648

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Superfamily: major prion protein

Query Match

Best Local Similarity 100.0%; Score 211; DB 2; Length 226;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVQ 40

DB 145 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVQ 184

RESULT 2

S71041 major prion protein - black-handed spider monkey (fragment)

C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AC50097.1; PID:G47437

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCH>

A/Cross-references: EMBL:U08309

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 40
Db 157 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Callithecus moloch (fragment)
C/Species: Callithecus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
A/Accession: S71048; S53632
R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PID:AA050100.1; PID:G4755
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203; 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 40
Db 166 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PID:AA050091.1; PID:G4743
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203; 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 40
Db 166 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 205

Db 166 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
A/Accession: S71045; S53628
R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PID:AA050081.1; PID:G47
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10; 'L', 12-202; 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 245;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFWHDCVNTTKKHVTYTTTGGNFETEDVKMERVVEQ 204

RESULT 6

U080

major prion protein precursor - human
N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C;
C/Species: Homo sapiens (man)
C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
R/Creutzfeldt, H.A.; Stowling, L.E.; Westaway, D.; Stubblieth, W.H.; Prusiner, S.B.; Do
DNA 5, 315-324, 1986
A/Title: Molecular cloning of a human prion protein cDNA.
A/Reference number: A24173; MUID:86300093; PMID:3755672
A/Accession: A24173
A/Molecule type: mRNA
A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PID:AA06182.1; PID:G190468
R/Creutzfeldt, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A/Title: Genomic structure of the human prion protein gene.
A/Reference number: A40372; MUID:91328137; PMID:1678248
A/Accession: A40372
A/Status: not compared with conceptual translation
A/Molecule type: DNA
A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G747846; PID:CAA58442.1; PID:G747847
R/Liao, Y.C.-J.; Iebio, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A/Reference number: A05017; MUID:86261778; PMID:3014653
A/Accession: A05017
A/Molecule type: mRNA
A/Residues: 8-117, 119-253 <LTA>

A/Cross-references: GB:D00015; NID:G220015; PID:BA00011.1; PID:G220016; GB:M13667; NID:
R/Teglavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A/Title: Amyloid protein of Gerstmann-Strausner-Scheinker disease (Indiana kindred) 18
A/Reference number: S14078; MUID:91160504; PMID:1672107

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:g474374; PIDN:AAC50096.1; PID:g4743
A/Note: the source was designated as *Symphalangus syndactylus*
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/Accession: I37032
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pectrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:g563208; PIDN:AAA68633.1; PID:g5632
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/Accession: I61847; S71060; S53615
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pectrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:g609303; PIDN:AAA68632.1; PID:g6093
R/Schätzl, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08296; NID:g474350; PIDN:AAC50085.1; PID:g474351
R/Schätzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, R, 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 12

prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
R/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropatholo.
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:A33959; NID:g191182; PIDN:AAA37014.1; PID:g191183
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
R/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:A33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
N/Alternate names: PrP; Scrapie prion
C/Species: Mus musculus (house mouse)

C>Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westlaw, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S. Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/LmJ

A/Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain di

R/Loch, C.; Cheesbro, B.; Race, R.; Kelch, J.M. Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: S02521; MUID:8816695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Cheesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.; Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315; MUID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIG>

F/23-231/Product: major prion protein #status predicted <MAT>

F/232-254/Domain: carboxyl-terminal propetide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180,196/Binding site: carboxydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

RESULT 15

161848 major prion protein precursor - common squirrel monkey

C/Species: Samitri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental t

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G5958

C/Superfamily: major prion protein

Query Match 99.5%; Score 210; DB 2; Length 252;

Best Local Similarity 97.5%; Pred. No. 1.3e-19;

Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:37
Job time: 12 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 1 NNFVHDCNVITTKQHTVTTTKGENTFEDVKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapept 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : UniProt_02.*
1: UniProt_sprot.*
2: UniProt_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	232	1	P40246 ateles geof
2	211	100.0	238	1	P40246 cercocebub
3	211	100.0	238	1	P40246 cercocebub
4	211	100.0	238	2	P40246 cercocebub
5	211	100.0	240	2	P40246 cercocebub
6	211	100.0	241	1	P40246 cercocebub
7	211	100.0	241	1	P40246 cercocebub
8	211	100.0	245	1	P40246 cercocebub
9	211	100.0	246	1	P40246 cercocebub
10	211	100.0	246	1	P40246 cercocebub
11	211	100.0	246	1	P40246 cercocebub
12	211	100.0	246	1	P40246 cercocebub
13	211	100.0	246	2	P40246 cercocebub
14	211	100.0	248	2	P40246 cercocebub
15	211	100.0	252	1	P40246 cercocebub
16	211	100.0	252	1	P40246 cercocebub
17	211	100.0	253	1	P40246 cercocebub
18	211	100.0	253	1	P40246 cercocebub
19	211	100.0	253	1	P40246 cercocebub
20	211	100.0	253	1	P40246 cercocebub
21	211	100.0	253	1	P40246 cercocebub
22	211	100.0	253	1	P40246 cercocebub
23	211	100.0	253	1	P40246 cercocebub
24	211	100.0	253	1	P40246 cercocebub
25	211	100.0	253	1	P40246 cercocebub
26	211	100.0	253	2	P40246 cercocebub
27	211	100.0	253	2	P40246 cercocebub
28	211	100.0	253	2	P40246 cercocebub
29	211	100.0	253	2	P40246 cercocebub
30	211	100.0	253	2	P40246 cercocebub
31	211	100.0	254	1	P40246 cercocebub

32	211	100.0	254	1	P40246 cercocebub
33	211	100.0	254	1	P40246 cercocebub
34	211	100.0	254	1	P40246 cercocebub
35	211	100.0	254	1	P40246 cercocebub
36	211	100.0	254	2	P40246 cercocebub
37	211	100.0	254	2	P40246 cercocebub
38	211	100.0	254	2	P40246 cercocebub
39	211	100.0	277	2	P40246 cercocebub
40	211	100.0	277	2	P40246 cercocebub
41	211	100.0	285	2	P40246 cercocebub
42	210	99.5	220	2	P40246 cercocebub
43	210	99.5	248	2	P40246 cercocebub
44	210	99.5	260	1	P40246 cercocebub
45	209	99.1	215	2	P40246 cercocebub

ALIGNMENTS

RESULT 1	P40246	STANDARD	PRT	232 AA
AC	P40246			
DT	01-FEB-1995 (Rel. 31, Created)			
DT	01-FEB-1995 (Rel. 31, Last sequence update)			
DT	05-JUL-2004 (Rel. 44, Last annotation update)			
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).			
GN	Name=PrP;			
OS	Ateles Geoffroyi (Black-handed spider monkey).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.			
OX	NCBI_TaxID=9509;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RX	MDL:95139066; PubMed=7837269;			
RA	Schaezel H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;			
RT	"Prion protein gene variation among primates."			
RL	J. Mol. Biol. 245:362-374(1995).			
CC	- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.			
CC	- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".			
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.			
CC	- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.			
CC	- SIMILARITY: Belongs to the prion family.			
CC	-----			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL Outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.ebi.ac.uk/announcements or send an email to license@ebi.ac.uk).			
CC	-----			
CC	EMBL: U08309; AAC50097.1; -			
CC	PIR: S71041; S71041.			
CC	HSSP: P23907; IG04.			
CC	InterPro: IPR00817; Prion.			
CC	Pfam: PF00377; Prion; 1.			
CC	Pfam: PF00391; Prion; 1.			
CC	PRINTS: PR00341; PRION.			
CC	PROSITE: PS00291; PRION_1; 1.			
CC	PROSITE: PS00706; PRION_2; 1.			
CC	GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.			
CC	NON_TER			
CC	SIGNAL			
CC	CHAIN			
CC	PROPEP			
CC	LIPID			

FT DISULFID 163 198 similarity.
 FT CARBOHYD 165 165 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 FT REPEAT 44 51 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 52 59 0.
 FT REPEAT 59 67 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT NON TER 232 232 4.
 SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
 Best Local Similarity 100.0%; Pred. No. 3.5e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTITKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 157 NNFWHDCVNTITKQHTVTTTGGNFETDVKMERVVEQ 196

RESULT 2

PRIO_CERAT STANDARD; PRT; 238 AA.
 AC Q95145; Q95200;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus aethiops, and
 OS Macaca sylvanus (Barbary ape).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecidae;
 NCBI_TaxID=36222, 9546;
 (1)

SEQUENCE FROM N.A.

RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru, and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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EMBL; U75384; AAB50623.1; -
 DR EMBL; U75382; AAB50629.1; -
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; Prion.
 DR PROSITE; PS00291; Prion_1; 1.
 DR PROSITE; PS00706; Prion_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

FT NON TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 215 Major prion protein.
 FT PROPEP 216 238 Removed in mature form (By similarity).
 FT LIPID 215 215 GPI-anchor amidated serine (By
 FT DISULFID 164 199 similarity).
 FT CARBOHYD 166 166 By similarity.
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
 Best Local Similarity 100.0%; Pred. No. 3.5e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNTITKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 158 NNFWHDCVNTITKQHTVTTTGGNFETDVKMERVVEQ 197

RESULT 3

PRIO_THERG STANDARD; PRT; 238 AA.
 AC Q95270;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP; Synonyms=Prp;
 OS Theropithecus gelada (Gelada baboon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Theropithecus.
 NCBI_TaxID=9565;
 (1)

SEQUENCE FROM N.A.

RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru, and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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EMBL; U75383; AAB50630.1; -
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; Prion.
 DR PROSITE; PS00291; Prion_1; 1.
 DR PROSITE; PS00706; Prion_2; 1.


```

DR PROSITE; PS00706; PRION_2; 1
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL
FT NON_TER 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 158 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
ID Q86XR1
AC Q86XR1;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -
DR InterPro; IPR00817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR KW Prion.
FT NON_TER 1
FT NON_TER 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 211; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 158 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
ID Q8VHV4
AC Q8VHV4;

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```

DT 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
ON NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4BD03F5F76693 CRC64;

Query Match 100.0%; Score 211; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
PRIO CALMO
ID PRIO CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callithecus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
OC Callithecus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL: U08312; AAC50100.1; -
DR PIR: S71048; S71048.
DR HSP: P23907; I004.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03977; Prion. 1.
DR PRINTS: PR00341; Prion. 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.

FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT DISULFID 172 207 By similarity.
FT LIPID 223 223 GPI-anchor amidated serine (By
similarity).
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
O.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013E7CABC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 205

RESULT 7
PRIO MANSP STANDARD; PRT; 241 AA.

AC P40255; Prion.
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandrilus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Mandrilus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL: U08303; AAC50091.1; -
DR PIR: S71056; S71056.
DR HSP: P23907; I004.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03977; Prion. 1.
DR PRINTS: PR00341; Prion. 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By
similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
O.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 205

RESULT 8
PRIO CERAE STANDARD; PRT; 245 AA.

AC P40250; Prion.
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Griwet), and
OC Cercopithecoidea; Cercopithecoidea; Cercopithecoidea; Cercopithecoidea;
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecoidea.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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CC      "rds".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
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CC      entities requires a license agreement (See http://www.1sb-sib.ch/announce/
CC      or send an email to license@1sb-sib.ch).
CC
CC      EMBL: U08291; AAC5080.1; -.
CC      EMBL: U08292; AAC5081.1; -.
CC      PIR: S53627; S53627.
CC      PIR: S71045; S71045.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      SIGNAL 1 22
CC      CHAIN 23 222
CC      PROPEP 223 245
CC      LIPID 222 222
CC
CC      DISULFID 171 206
CC      CARBOHYD 173 173
CC      CARBOHYD 189 189
CC      DOMAIN 51 83
CC
CC      REPEAT 51 59
CC      REPEAT 60 67
CC      REPEAT 68 75
CC      REPEAT 76 83
CC      SEQUENCE .245 AA; 26885 MW; D582B58E2726C99A CRC64;
CC
CC      Query Match 100.0%; Score 211; DB 1; Length 245;
CC      Best Local Similarity 100.0%; Pred. No. 3.7e-19;
CC      Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
CC      Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
CC      Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204
CC
CC      RESULT 9
CC      PRIO_CERNO STANDARD: PRT; 246 AA.
CC      ID PRIO_CERNO
CC      AC P61761; Q95172; Q95173;
CC      DT 01-NOV-1997 (Rel. 35, Created)
CC      DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC      DT 05-JUN-2004 (Rel. 44, Last annotation update)
CC      DE Major prion protein precursor (PrP) (PrP27-30) (P=PrP3-35C) (Fragment).
CC      GN Name=PrNP;
CC      OS Cercopithecus mona (Mona monkey).
CC      OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC      OC Cercopithecinae; Cercopithecus.
CC      OX NCBI_TaxID=36226;
CC      RN [1]
CC      RP SEQUENCE FROM N.A.
CC      RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
CC      RT "Evidence for an increased substitution rate of the hominoid prion
CC      protein gene during the period of brain expansion.";

```

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rds".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
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CC      or send an email to license@1sb-sib.ch).
CC
CC      EMBL: U75386; AAB50625.1; -.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      NON TER 1 1
CC      SIGNAL <1 15
CC      CHAIN 16 223
CC      PROPEP 224 246
CC      LIPID 223 223
CC
CC      DISULFID 172 207
CC      CARBOHYD 174 174
CC      CARBOHYD 190 190
CC      DOMAIN 44 84
CC
CC      REPEAT 44 52
CC      REPEAT 53 60
CC      REPEAT 61 68
CC      REPEAT 69 76
CC      REPEAT 77 84
CC      SEQUENCE .246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC
CC      Query Match 100.0%; Score 211; DB 1; Length 246;
CC      Best Local Similarity 100.0%; Pred. No. 3.8e-19;
CC      Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
CC      Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
CC      Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205
CC
CC      RESULT 10
CC      PRIO_CERNE STANDARD: PRT; 246 AA.
CC      ID PRIO_CERNE
CC      AC P61762; Q95172; Q95173;
CC      DT 01-NOV-1997 (Rel. 35, Created)
CC      DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC      DT 05-JUN-2004 (Rel. 44, Last annotation update)
CC      DE Major prion protein precursor (PrP) (PrP27-30) (P=PrP3-35C) (Fragment).
CC      GN Name=PrNP;
CC      OS Cercopithecus neglectus (Debranza's monkey).
CC      OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC      OC Cercopithecinae; Cercopithecus.
CC      OX NCBI_TaxID=36227;
CC      RN [1]
CC      RP SEQUENCE FROM N.A.

```

RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases Kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL: U75387; AAB50626.1; -
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON TER 1 1
 FT SIGNAL 1 15
 FT CHAIN 1 15
 FT PROPEP 224 223
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFFHDCVNIITKQHTVTTTNGENFTEDYQKMERVVEQ 40
 Db 166 NNFFHDCVNIITKQHTVTTTNGENFTEDYQKMERVVEQ 205
 RESULT 11
 ID PRIO_CERTO STANDARD; PRT; 246 AA.
 AC 095176;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 05-NOV-1997 (Rel. 35, Last sequence update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Cercopithecus torquatus alyx (Red-crowned mangabey) (Socoty mangabey).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Cercopithecoidea; Cercopithecidae; Cercopithecinae; Cercopithecus.

OX NCBI:TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases Kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL: U75385; AAB50628.1; -
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON TER 1 1
 FT SIGNAL 1 15
 FT CHAIN 1 15
 FT PROPEP 224 223
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26914 MW; F58679CB8C5AD7 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFFHDCVNIITKQHTVTTTNGENFTEDYQKMERVVEQ 40
 Db 166 NNFFHDCVNIITKQHTVTTTNGENFTEDYQKMERVVEQ 205
 RESULT 12
 ID PRIO_ERYPA STANDARD; PRT; 246 AA.
 AC 095174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 05-NOV-1997 (Rel. 35, Last sequence update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Erythrocebus.
 OC NCBI_Taxid=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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CC -----
 DR EMBL: U75388; AAB50627.1; -.
 DR HSP: P23907; I604.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; prion; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26886 MW; D3SD105BEC3108 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 205

RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TRENDEL 27, Created)
 DT 02-MAR-2004 (TRENDEL 27, Last sequence update)
 DT 02-MAR-2004 (TRENDEL 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OC NCBI_Taxid=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY219883; AAO83636.1; -.
 KM Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B3C8841566 CRC64;

Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 205

RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (TRENDEL 20, Created)
 DT 01-MAR-2002 (TRENDEL 20, Last sequence update)
 DT 01-JUN-2003 (TRENDEL 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 OC NCBI_Taxid=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL: AF367624; AAL57231.1; -.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PrP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KM Prion.
 FT NON_TER 248 248
 SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;

Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 212

RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-UTL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PpP27-30) (PpP33-35C).
GN Name=Prnp;
OS Calitrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrix.
RN [1] TextID=9483;
RP
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08304; AAC50092.1; -.
DR PIR; S53634; S53634.
DR HSBP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; Prion.
DR PROSITE; PS00281; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR KMGlycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22 By similarity.
FT CHAIN 1 229 Major prion protein.
FT PROPEP 23 229 Removed in mature form (By similarity).
FT LIPID 229 229 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 178 213 By similarity.
FT CARBOHYD 180 180 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 196 180 N-linked (GlcNAc...) (Potential).
FT DOMAIN 51 90 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 58 0.
FT REPEAT 59 66 1.
FT REPEAT 67 74 2.
FT REPEAT 75 82 3.
FT REPEAT 83 90 4.
SQ SEQUENCE 252 AA; 27639 MW; B2800B60F5DC664 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred.No.3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:27
 Job time : 64.6557 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5A COMB.pep: *
2: /cgn2_6/ptodata/1/1aa/5B COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6A COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/6B COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PCTUS COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	* Query Match	Length	DB ID	Description
1	211	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	211	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	211	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	211	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	211	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	211	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	211	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	211	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	211	100.0	253	1 US-08-692-892-2	Sequence 8, Appl
10	211	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	211	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	211	100.0	253	3 US-09-031-168-8	Sequence 8, Appl
13	211	100.0	253	3 US-09-128-450-20	Sequence 20, Appl
14	211	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	211	100.0	253	3 US-09-823-494-20	Sequence 20, Appl
16	211	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	211	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	211	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	211	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	211	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	211	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	211	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	211	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	211	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	211	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	211	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	211	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	211	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254	2 US-08-713-939A-1	Sequence 1, Appl
41	211	100.0	254	2 US-08-868-162A-21	Sequence 21, Appl
42	211	100.0	254	3 US-09-031-168-7	Sequence 7, Appl
43	211	100.0	254	3 US-09-128-450-19	Sequence 19, Appl
44	211	100.0	254	3 US-09-128-450-28	Sequence 28, Appl
45	211	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556, 823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 3.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 123

RESULT 2

US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 211; DB 4; Length 245;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 3

US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 4

US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match

Best Local Similarity 100.0%; Score 211; DB 4; Length 252;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 211

RESULT 5

US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 211

RESULT 6

US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Tellins, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESS: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELFX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/0868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESS: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELFX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciil
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149

GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caubrey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suelette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRP
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMERVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match
Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suzele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match
Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQ 212

Search completed: December 3, 2004, 00:18:54
Job time : 15.1475 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTYTKGFETEDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues
Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications_AA:*

- 1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/ptodata/1/pubppaa/PCr_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
- 4: /cgn2_6/ptodata/1/pubppaa/US06_PUBCOMB.pep:*
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- 9: /cgn2_6/ptodata/1/pubppaa/US09_PUBCOMB.pep:*
- 10: /cgn2_6/ptodata/1/pubppaa/US09B_PUBCOMB.pep:*
- 11: /cgn2_6/ptodata/1/pubppaa/US09C_PUBCOMB.pep:*
- 12: /cgn2_6/ptodata/1/pubppaa/US09_NEW_PUB.pep:*
- 13: /cgn2_6/ptodata/1/pubppaa/US10A_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/1/pubppaa/US10B_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/1/pubppaa/US10C_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/1/pubppaa/US10D_PUBCOMB.pep:*
- 17: /cgn2_6/ptodata/1/pubppaa/US10_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pep:*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pep:*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	211	100.0	253	9	US-09-804-987-3	Sequence 3, Appl1
25	211	100.0	253	9	US-09-919-172-57	Sequence 5, Appl1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
Db 52 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 91

RESULT 2

US-10-050-898-348
; Sequence 348, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisoc, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Gebbel, Peter
; APPLICANT: Ploesek, Christine
; APPLICANT: Ottmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
Db 52 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 91

RESULT 3

US-10-346-190-89
; Sequence 89, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 89
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 4

US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisoc, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Gebbel, Peter
; APPLICANT: Ploesek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrP construct
US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
Db 53 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 92

RESULT 5

US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellicholi, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lubitz, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: Patentin Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 211; DB 14; Length 163;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 122

RESULT 10

US-09-745-003-12
;; Sequence 12, Application US/09745003
;; Patent No. US20020042122A1
;; GENERAL INFORMATION:
;; APPLICANT: Bazan, Fernando J
;; TITLE OF INVENTION: Human Proteins; Related Reagents
;; FILE REFERENCE: P-P2
;; CURRENT APPLICATION NUMBER: US/09/745,003
;; CURRENT FILING DATE: 2000-12-20
;; NUMBER OF SEQ ID NOS: 13
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 12
;; LENGTH: 164
;; TYPE: PRT
;; ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 211; DB 9; Length 164;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 121

RESULT 11

US-10-470-848-10
;; Sequence 10, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCT
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 10
;; LENGTH: 200
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 200;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40

DB 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 182

RESULT 12

US-10-470-848-3
;; Sequence 3, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCT
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 3
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 190

RESULT 13

US-10-745-393-1
;; Sequence 1, Application US/10745393
;; Publication No. US20040203131A1
;; GENERAL INFORMATION:
;; APPLICANT: Faatz, Elke
;; APPLICANT: Scholz, Christian
;; APPLICANT: Stock, Werner
;; APPLICANT: Schaefer, Peter
;; TITLE OF INVENTION: Complexes comprising a prion protein and peptide1 prolyl isomerase
;; FILE REFERENCE: 12290 US3 (9793/141)
;; CURRENT APPLICATION NUMBER: US/10/745,393
;; CURRENT FILING DATE: 2003-12-23
;; PRIOR APPLICATION NUMBER: EP 0115225.3
;; PRIOR FILING DATE: 2001-06-22
;; PRIOR APPLICATION NUMBER: EP 01120939.2
;; PRIOR FILING DATE: 2001-08-31
;; PRIOR APPLICATION NUMBER: US 10/167,774
;; PRIOR FILING DATE: 2002-06-10
;; PRIOR APPLICATION NUMBER: US 10/179,905
;; PRIOR FILING DATE: 2002-06-24
;; NUMBER OF SEQ ID NOS: 3
;; SOFTWARE: Patentin version 3.1
;; SEQ ID NO 1
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 211; DB 17; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQ 190

RESULT 14

US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:ChM-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 190
|||

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:ChV type prion protein
US-10-470-848-7

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 190
|||

Search completed: December 3, 2004, 01:07:44
Job time : 47.343 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNIITKQHTV.....ENFTETDVKMERVVEQMC1 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1960s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	242	100.0	253	4	AAB72339
2	242	100.0	253	4	AAB72345
3	242	100.0	253	4	AAB72356
4	242	100.0	254	6	ABR42791
5	239	98.8	117	5	ABG94357
6	239	98.8	117	5	ABG80669
7	239	98.8	117	5	ABD24196
8	239	98.8	142	2	AAW17686
9	239	98.8	163	7	ADB63859
10	239	98.8	200	5	ABG31907
11	239	98.8	208	3	AAB07318
12	239	98.8	208	3	AAB07329
13	239	98.8	208	5	ABG31902
14	239	98.8	245	4	AAB72342
15	239	98.8	245	4	AAB72352
16	239	98.8	253	2	AAW6715
17	239	98.8	253	2	AAW69660
18	239	98.8	253	2	AAW85901
19	239	98.8	253	2	AAW07994
20	239	98.8	253	3	AAW81485
21	239	98.8	253	3	AAW06272
22	239	98.8	253	3	AAW15035
23	239	98.8	253	4	AAW72347
24	239	98.8	253	4	AAW72353
25	239	98.8	253	4	AAW72344

26	239	98.8	253	4	AAB72351	Aab72351 Hamadryas
27	239	98.8	253	4	AAB72348	Aab72348 Prion pro
28	239	98.8	253	4	AAB72346	Aab72346 Prion pro
29	239	98.8	253	4	AAB72355	Aab72355 Prion pro
30	239	98.8	253	4	AAB72349	Aab72349 Prion pro
31	239	98.8	253	4	AAB72340	Aab72340 Orangutan
32	239	98.8	253	4	AAB72338	Aab72338 Human pri
33	239	98.8	253	4	AAB72354	Aab72354 Capuchin
34	239	98.8	253	4	AAB72341	Aab72341 Gorilla p
35	239	98.8	253	4	AAB61770	Aab61770 Human pri
36	239	98.8	253	4	AAB82112	Aab82112 Human pri
37	239	98.8	253	4	AAW65853	AAW65853 Human pri
38	239	98.8	253	5	ABP51787	ABP51787 Human pri
39	239	98.8	253	5	ABG31901	ABG31901 Human pri
40	239	98.8	253	5	ABR04426	ABR04426 Human pri
41	239	98.8	253	5	AAE15603	AAE15603 Human pri
42	239	98.8	253	5	ABW78009	ABW78009 Amino aci
43	239	98.8	253	5	ABG77181	ABG77181 Prostate
44	239	98.8	253	6	ABU58668	ABU58668 Human pri
45	239	98.8	253	6	AAE33227	AAE33227 Human pri

ALIGNMENTS

RESULT 1
AAB72339
ID AAB72339 standard; peptide; 253 AA.

AC AAB72339;
DT 17-MAY-2001 (first entry)

DE Chimpanzee prion protein cellular form (PrPc) amino acid sequence.
XX
XX
XX Prion protein; cellular form; PrPc; stable region; antibody; BSB; CUD;
XX prion disease; spongiform encephalopathies; scrapie; chimpanzee;
KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.

OS Pan paniscus.

XX
XX
XX Key Location/Qualifiers
FT Region 176..221
FT /note="Stable region, specifically claimed in claim 3"

XX WO200107479-A2.

XX PD 01-FEB-2001.

XX PE 25-JUL-2000; 2000WO-GB002873.

XX PR 27-JUL-1999; 99GB-00017491.

XX PR 30-JUL-1999; 99GB-00017878.

XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.

XX Collinge J, Clarke AR, Walcho JP, Jackson GS, Hosszu LLP;

XX WPI; 2001-168538/17.

XX New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.

XX Claim 3; Fig 5; 69pp; English.

XX This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC remove PrPc, and may be used in preventative medicine. The antibody may
CC be used in the prevention, treatment or diagnosis of a prion disease,

CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC chimpanzee prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 XX
 SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.6e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 2
 ID AAB72345 standard; peptide; 253 AA.
 XX
 AC AAB72345;
 XX
 DT 17-MAY-2001 (first entry)
 XX

DE Glibon prion protein cellular form (PrPc) amino acid sequence.
 XX
 KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; glibon;
 XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 OS
 XX Hylobates lar.

XX
 FH Key Location/Qualifiers
 FT Region 176..221
 XX /note= "Stable region, specifically claimed in claim 3"
 XX
 PN WO200107479-A2.
 XX
 PD 01-FEB-2001.
 XX
 PF 25-JUL-2000; 2000MO-GB002873.
 XX
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 XX
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 FI Collinge J, Clarke AR, Maithe JP, Jackson GS, Hosszu LLP;
 XX
 DR WPI; 2001-168538/17.
 XX

PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 PS Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,
 CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC glibon prion protein, the stable region of the protein may be used in the
 CC production of anti-PrPc antibodies
 XX
 SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.6e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 3
 ID AAB72356 standard; peptide; 253 AA.
 XX
 AC AAB72356;
 XX
 DT 17-MAY-2001 (first entry)
 XX

DE Siamang prion protein cellular form (PrPc) amino acid sequence.
 XX
 KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; siamang;
 XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 OS

XX Hylobates syndactylus.
 XX
 FH Key Location/Qualifiers
 FT Region 176..221
 XX /note= "Stable region, specifically claimed in claim 3"
 XX
 PN WO200107479-A2.
 XX
 PD 01-FEB-2001.
 XX
 PF 25-JUL-2000; 2000MO-GB002873.
 XX
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 XX
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 FI Collinge J, Clarke AR, Maithe JP, Jackson GS, Hosszu LLP;
 XX
 DR WPI; 2001-168538/17.
 XX

PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 PS Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,
 CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC siamang prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 XX
 SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.6e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 4
ABR42791 standard; protein; 254 AA.
XX ABR42791;
AC ABR42791;
XX
XX 08-SEP-2003 (first entry)
DT
XX Chimpanzee prion protein.
DE
XX Chimpanzee; prion protein; prionosis; neurotropic; neuroprotective;
KM immunogen; vaccine.
XX Pan troglodytes.
XX WO2003045128-A2.
PN 05-JUN-2003.
PD
XX 21-NOV-2002; 2002WO-US037634.
PF
XX 21-NOV-2001; 2001US-0331801P.
PR
XX (UTNY) UNIV NEW YORK STATE.
PA
XX Frangione B, Wisniewski T, Sigurdsson EM;
PI WPI, 2003-505145/47.
XX
XX New synthetic immunogenic but non-deposit forming peptides, useful for
PT inducing an immune response to prions, amyloids, amylin or amylin
PT fibrils, particularly for treating e.g. Alzheimer's, scrapie or
PT Creutzfeldt-Jacob disease.
XX
XX Disclosure; Page 226; 265pp; English.
PS
XX The present sequence is the amino acid sequence of chimpanzee prion
CC protein. The invention provides a synthetic immunogenic but non-deposit-
CC forming polypeptide that is homologous to human (see ABR42789) or bovine
CC (see ABR42798) prion protein. Such peptides, alone or conjugated to an
CC immunostimulant, are used to induce an immune response to prion, and
CC immunizing compositions comprising the peptides are used in a claimed
CC method for inducing an immune response to hnp and prion deposits.
CC Antibodies directed against the peptides can be used in passive
CC immunization
XX
XX Sequence 254 AA;
SQ
Query Match 100.0%; Score 242; DB 6; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.ee-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 5
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
XX ABG94357;
AC
XX
XX 10-DEC-2002 (first entry)
DT
XX Modified human prion protein fragment.
DE
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
XX Homo sapiens.
OS

XX
PN WO200256905-A2.
XX
XX 25-JUL-2002.
PD
XX
XX 21-JAN-2002; 2002WO-IB000166.
PF
XX
XX 19-JAN-2001; 2001US-0262379P.
PR
XX 04-MAY-2001; 2001US-0288549P.
PR
XX 05-OCT-2001; 2001US-0326998P.
PR
XX 07-NOV-2001; 2001US-0331045P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
PA
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Piossek C;
PI WPI; 2002-627351/67.
XX
XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
PT
XX Disclosure; Page 441; 441pp; English.
PS
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organism comprising
CC at least one first attachment site, where the organism is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (Abeta1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the association to form an ordered and
CC scaffold interact through the association to form an ordered and
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant Obeta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention
XX
XX Sequence 117 AA;
SQ
Query Match 98.8%; Score 239; DB 5; Length 117;
Best Local Similarity 97.8%; Pred. No. 1.ee-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 49 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 94

RESULT 6
ABG80669
ID ABG80669 standard; protein; 117 AA.
XX
XX ABG80669;
AC
XX
XX 29-NOV-2002 (first entry)
DT
XX Human prion protein/cysteine-containing peptide fusion protein.
DE
XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutein;
KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
KM

KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM angiotensinoproliferative disease lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 OS Homo sapiens.
 OS Synthetic.
 XX WO00256907-A2.
 XX
 XX PD 25-JUL-2002.
 XX
 XX PF 21-JAN-2002; 2002MO-IB000168.
 XX
 XX PR 19-JAN-2001; 2001US-0262379P.
 XX PR 04-MAY-2001; 2001US-0288349P.
 XX PR 05-OCT-2001; 2001US-0326989P.
 XX PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX PA (NOVS) NOVARTIS PHARMA AG.
 XX PA (MAUR) MAURER P.
 XX PA (LECH) LECHNER F.
 XX PA (ORTM) ORTMANN R.
 XX PA (LUBO) LUBEND R.
 XX PA (STAU) STAUFENBIEL M.
 XX PA (FREY) FREY P.
 PI Maurer P, Lechner F, Ortman R, Lucend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisoc A, Seibel P, Plosssek C;
 DR WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 418; 418pp; English.
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgA-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiotensinoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC sequence for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX SQ Sequence 117 AA;
 Query Match
 Best Local Similarity 98.8%; Score 239; DB 5; Length 117;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 1 SSQNFVHDCVNTITIKOHVTTTGTGENTFEDVYQMERVVEQWCI 46
 49 SSQNFVHDCVNTITIKOHVTTTGTGENTFEDVYQMERVVEQWCI 94
 RESULT 7
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX 15-JAN-2004 (first entry)
 DE Modified human prion protein amino acid sequence.
 KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 OS Synthetic.
 OS prion.
 XX WO2003059386-A2.
 XX PD 24-JUL-2003.
 XX
 XX PF 17-JAN-2003; 2003MO-EP000460.
 XX
 XX PR 18-JAN-2002; 2002US-00050902.
 XX PR 21-JAN-2002; 2002MO-IB000166.
 XX PR 08-JUL-2002; 2002US-0393725P.
 XX PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX PA Bachmann M, Maurer P, Pellisoli E, Renner WA;
 PI WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 XX Creutzfeldt-Jakob Disease) comprising a virus-like particle (e.g. RNA-
 XX particle) and at least one prion protein or peptide bound to the virus-like
 XX particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 XX like or a core particle with at least one first attachment site and at
 XX least one antigen or antigenic determinant that is a prion protein (PrP)
 XX or its dimer, or a PrP peptide, the antigen or antigenic determinant
 XX being bound to the virus-like or core particle. The vaccine of the
 XX invention may have neuroprotective or antiinflammatory activity. The
 XX composition is useful as a medicament or in manufacturing a medicament
 XX for the treatment or prevention of prion diseases. The prion diseases may
 XX include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 XX Disease. The present sequence is the amino acid sequence of a modified
 XX human prion protein (PrP) which may be used during the creation of the
 XX vaccine composition of the invention.
 XX
 XX Sequence 117 AA;
 Query Match
 Best Local Similarity 98.8%; Score 239; DB 7; Length 117;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
 ID 49 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 8
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.

AC AAM17686;

DT 14-JAN-1998 (first entry)

XX Prion protein peptide Hu 90-231.

DE Prion protein; PrP, alpha helical domain; screening; inhibition; binding;

KM scrapie; bovine spongiform encephalopathy; BSE; CJD;

KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;

XX Gerstmann-Strausler-Scheinker disease; hamster; human.

XX Homo sapiens.

XX NO9716728-A1.

XX 09-MAY-1997.

XX 28-OCT-1996; 96MO-US017462.

XX 02-NOV-1995; 95US-00556823.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Kaneko K, Cohen FE;

XX WPI; 1997-272248/24.

XX Prion proteins (PrPs) having at least one alpha-helical domain - used in

XX assays for screening compounds able to inhibit or decrease the binding of

XX PrP peptide(s) to cellular prion proteins or peptide(s).

XX Claim 11, Page 7-38; 50pp; English.

XX The present sequence represents a prion protein (PrP) peptide. PrP has an

XX ability to induce a conformational change in cellular prion protein (PrP-

XX c). Methods, for screening compounds which inhibit the binding of PrP-c

XX to a PrP peptide, are used for screening for drugs that may be useful in

XX the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform

XX encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-

XX Strausler-Scheinker disease) and FFI (fatal familial insomnia)

XX Sequence 142 AA;

XX Query Match 98.8%; Score 239; DB 2; Length 142;

XX Best Local Similarity 97.8%; Pred. No. 2e-23;

XX Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 81 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 9

AD63859

ID ADB63859 standard; protein; 163 AA.

AC ADB63859;

XX 04-DEC-2003 (first entry)

XX Human protein encoded by clone ASTR020055570.

XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;

KW cell regeneration; membrane protein; signal transduction-related protein;

XX transcription-related protein; osteoporosis; neurological disease;

XX cancer; tumour.

XX Homo sapiens.

XX EP1308459-A2.

XX 07-MAY-2003.

XX 28-MAR-2002; 2002EP-00007401.

XX 05-NOV-2001; 2001JP-00379298.

XX 25-JAN-2002; 2002US-00350978.

XX (HELI-) HELIX RES INST.

XX (REAS-) RES ASSOC BIOTECHNOLOGY.

XX Ieogai T, Sugiyama T, Otsuki T, Makamatsu A, Sato H, Ishii S,

XX Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,

XX Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;

XX WPI; 2003-450961/43.

XX N-PADB; ADB61889.

XX New polynucleotides and polypeptides, useful for developing a diagnostic

XX marker or medicines for regulation of their expression and activity, or

XX as targets of gene therapy.

XX Claim 1, Page; 222pp; English.

XX The invention discloses a polynucleotide comprising a sequence selected

XX from 1970 fully defined nucleotide sequences which encode novel

XX polypeptides. Also claimed is a polypeptide encoded by the polynucleotide

XX or its partial peptide, an antibody binding to the polypeptide or peptide

XX of the polynucleotide, immunologically assaying the polypeptide or

XX peptide of the polynucleotide by contacting the polypeptide or peptide

XX with the antibody of the encoded protein, and observing the binding

XX between the two, a transformant carrying the polynucleotide in an

XX expressible manner and an antisense polynucleotide. The oligonucleotide

XX is useful as a primer for synthesizing the polynucleotide, or as a probe

XX for detecting the polynucleotide. The polynucleotides and encoded

XX proteins are useful as pharmaceutical agents and many disease-related

XX genes may be included in them, for developing a diagnostic marker or

XX medicines for regulation of their expression and activity, or as targets

XX of gene therapy. The genes are involved in tissue and/or cell

XX regeneration. Membrane proteins, signal transduction-related proteins,

XX transcription-related proteins, disease-related proteins and genes

XX encoding them can be used as indicators for diseases (e.g. osteoporosis,

XX neurological diseases, cancer, tumours. The cDNA may be used to regulate

XX the activity or expression of the encoded protein to treat diseases. The

XX sequence data for this patent is not represented in the printed

XX specification, but is based on sequence information supplied by the

XX European Patent Office.

XX Sequence 163 AA;

XX Query Match 98.8%; Score 239; DB 7; Length 163;

XX Best Local Similarity 97.8%; Pred. No. 2.3e-23;

XX Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 80 SSNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 125

RESULT 10

ABG31907

ID ABG31907 standard; protein; 200 AA.

XX ABG31907;

DT 05-NOV-2002 (first entry)

XX Human prion protein related peptide #6.

DE Prion; human; follicular dendritic cells; FDC; infection;

KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Homo sapiens.

XX MO200261418-A1.

XX 08-AUG-2002.

XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNITV TOHOKU.

XX Kilmoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal

XX prion protein sedimentation in non-human follicular dendritic cells as

XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Example 2; Page 63-64; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-

XX human prion disease infection factor in a sample by using abnormal prion

XX protein sedimentation in non-human follicular dendritic cells (FDC) as

XX indication. The method of the invention is useful for screening (non-)

XX on drugs like blood preparations, foods and cosmetics, and for developing

XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob

XX disease (CJD). The method of the invention is simple and quick. The

XX present sequence represents a human prion related protein of the

XX invention

XX Sequence 200 AA;

XX Query Match

XX Best Local Similarity 98.8%; Score 239; DB 5; Length 200;

XX Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

XX 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

XX 140 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 185

XX RESULT 11

XX AAB07318 standard; protein; 208 AA.

XX AAB07318;

XX 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;

XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Homo sapiens.

XX Key

XX Location/Qualifiers

XX 29..69

XX /note= "Repeat region consisting of tandem repeats of

XX Disulfide-bond

XX 157..192

XX Modified-site

XX 208

XX /note= "C-terminal phospho-inositol glycolipid membrane

FT anchor (-GPI) "

XX MO200029850-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99MO-F1000897.

XX 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

XX (BSR-) BSRRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of

XX transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an

XX antibody, which is then detected. The presence of PrP epitope is captured by an

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

XX Query Match

XX Best Local Similarity 98.8%; Score 239; DB 3; Length 208;

XX Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

XX 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

XX 148 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 193

XX RESULT 12

XX AAB07329 standard; protein; 208 AA.

XX AAB07329;

XX 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;

XX bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX Homo sapiens.

XX Key

XX Location/Qualifiers

XX 29..69

XX /note= "Repeat region consisting of tandem repeats of

XX Disulfide-bond

XX 157..192

XX Modified-site

XX 208

XX /note= "C-terminal phospho-inositol glycolipid membrane

XX anchor (-GPI) "

XX 25-MAY-2000.

PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 XX (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkelt CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 XX
 SQ Sequence 208 AA;
 XX
 Query Match 98.8%; Score 239; DB 3; Length 208;
 Best Local Similarity 97.8%; Pred. No. 3.1e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 SSQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 46
 Db 148 SSQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 193
 XX
 RESULT 13
 ABB31902
 XX ABB31902 standard; protein; 208 AA.
 AC
 XX ABB31902;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related protein #2.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 PN
 PD 08-AUG-2002.
 XX
 XX 31-JAN-2002; 2002WO-JP000803.
 PF
 XX 31-JAN-2001; 2001JP-00024279.
 PR
 PA (TOHO) UNIV TOHOKU.
 XX
 PI Kitamoto T, Miyoshi K, Mohri S;
 XX
 DR WPI; 2002-619277/66.
 XX
 PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX

PS Disclosure; Page 49-50; 69pp; Japanese.
 XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;
 XX
 Query Match 98.8%; Score 239; DB 5; Length 208;
 Best Local Similarity 97.8%; Pred. No. 3.1e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 SSQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 46
 Db 148 SSQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 193
 XX
 RESULT 14
 AAB72342
 ID AAB72342 standard; peptide; 245 AA.
 XX
 AC AAB72342;
 XX
 DT 06-AUG-2003 (revised)
 DT 17-MAY-2001 (first entry)
 XX
 DE Monkey prion protein cellular form (PrPc) amino acid sequence.
 XX
 KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; scrapie; monkey;
 KM bovine spongiform encephalopathy; BSE; Creutzfeldt-Jacob disease.
 XX
 OS Primates.
 XX
 FH Key location/Qualifiers
 FT Region 176..221
 XX /note="Stable region, specifically claimed in claim 3"
 XX
 PN WO200107479-A2.
 PN
 PD 01-FEB-2001.
 XX
 XX 25-JUL-2000; 2000WO-GB002873.
 PF
 XX 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 PR
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Collinge J, Clarke AR, Walcho JP, Jackson GS, Hosszu LBP;
 XX
 DR WPI; 2001-168538/17.
 XX
 XX New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jacob disease in humans.
 PT
 PS Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,

CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC monkey prion protein, the stable region of the protein may be used in the
CC production of anti-PrPc antibodies. (Updated on 06-AUG-2003 to correct OS
CC field.)
XX

SO Sequence 245 AA;

Query Match 98.8%; Score 239; DB 4; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.8e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQMC 46
Db 162 SSONNFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQMC 207

RESULT 15

AAB72352 AAB72352 standard; peptide; 245 AA.

AC AAB72352;

DT 17-MAY-2001 (first entry)

DB Cercopithecus prion protein cellular form (PrPc) amino acid sequence.

XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
XX prion disease; spongiform encephalopathies; Scrapie; cercopithecus;
XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
OS Cercopithecus sp.

Key Location/Qualifiers
FT Region 176..221
/note="Stable region, specifically claimed in claim 3"

WO200107479-A2.

01-FEB-2001.

25-JUL-2000; 2000WO-GB002673.

27-JUL-1999; 99GB-00017491.
30-JUL-1999; 99GB-00017678.

(IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.

Collinge J, Clarke AR, Waltho JP, Jackson GS, Hosszu LLP,
WPI; 2001-168538/17.

New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX

Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC remove PrPc, and may be used in preventative medicine. The antibody may
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC ceropithecus prion protein, the stable region of the protein may be used
CC in the production of anti-PrPc antibodies
XX
XX Sequence 245 AA;

Query Match 98.8%; Score 239; DB 4; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.8e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQMC 46
Db 162 SSONNFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQMC 207

Search completed: December 3, 2004, 00:55:37
Job time: 77.1639 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSONNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQWCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB ID	Description
1	242	100.0	253	2	SS3635
2	242	100.0	253	2	I61847
3	239	98.8	241	2	S71048
4	239	98.8	241	2	S71056
5	239	98.8	245	2	S71045
6	239	98.8	253	1	UJHU
7	239	98.8	253	2	I64423
8	239	98.8	253	2	S71055
9	239	98.8	253	2	I17032
10	238	98.3	226	2	A53892
11	238	98.3	252	2	I61848
12	238	98.3	254	2	A23544
13	237	97.9	253	2	S53617
14	237	97.9	264	2	S37137
15	236	97.5	232	2	S71041
16	236	97.1	254	2	B34759
17	235	97.1	254	2	A34759
18	234	96.7	245	2	S53627
19	234	96.7	252	2	S53631
20	234	96.7	253	2	SS3624
21	234	96.7	253	2	SS3620
22	234	96.7	253	2	SS3620
23	234	96.7	253	2	SS3625
24	234	96.7	253	2	SS3614
25	234	96.7	253	2	SS3616
26	234	96.7	253	2	SS3618
27	234	96.7	253	2	SS3619
28	234	96.7	256	2	UJ0268
29	234	96.7	264	2	A54330

30	233	96.3	256	2	S37149	prion protein - go
31	233	96.3	256	2	A54281	major prion protei
32	233	96.3	260	2	S53629	major prion protei
33	231	95.5	252	2	S53634	major prion protei
34	230	95.0	239	2	S53633	major prion protei
35	230	95.0	257	2	JQ1900	major prion protei
36	228	94.2	252	2	JC6175	prion protein - ra
37	227	93.8	254	1	UJHYIH	major prion PrP-Sc
38	227	93.8	257	2	A23545	major prion PrP27-
39	227	93.8	267	2	A37372	prion protein homo
40	77	31.8	267	1	UJCH	major prion protei
41	76	31.4	273	2	A46280	prion protein - ch
42	61.5	25.4	533	1	D71338	probable ribose/ga
43	60.5	25.0	182	2	A10130	conserved hypothe
44	58.5	24.2	258	2	AF2524	hypothetical prote
45	58	24.0	139	2	H90004	hypothetical prote

ALIGNMENTS

RESULT 1
SS3635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C>Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
C:Accession: S53635
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53635
A>Status: nucleic acid sequence not shown; translation not shown
A:Residues: 1-253 <SCH>
A:Molecule type: DNA
A:Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AAC50096.1; PID:947437
A>Note: the source was designated as Synphalangus syndactylus
A>Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C:Superfamily: major prion protein

Query Match 100.0%; Score 242; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 170 SSONNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 2

I61847
major prion protein precursor - chimpanzee
C:Species: Pan troglodytes (chimpanzee)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C:Accession: I61847; S71060; S53615
R:Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A:Title: Infectious amyloid precursor gene sequences in primates used for experimental c
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I61847
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AAA68632.1; PID:96093
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71060
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08296; NID:9474350; PIDN:AAC50085.1; PID:9474351
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 242; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 46
Db 170 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 215

RESULT 3

S71048
major prion protein - Calliobus moloch (fragment)
C/Species: Calliobus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCH>

A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 241;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 46
Db 163 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 208

RESULT 4

S71056
major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71056

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Residues: 1-203, 'R', 205-240 <SCH>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 241;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 46
Db 163 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 208

RESULT 5

S71045
major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G4743.

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'I', 12-202, 'R', 204-239 <SCH>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 46
Db 162 SSONNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQMC 207

RESULT 6

UUHU
major prion protein precursor - human

N/Alternate names: 11k amyloid protein; 27-30k sialoglycoprotein; PrP 27-30; PrP 33-35C;

C/Species: Homo sapiens (man)

C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C/Accession: A24173; A40372; A05017; S14078; I5432; I68597; I58135; I59184; I79633; I796

R/Kretschmar, H.A.; Stowling, L.E.; Westaway, D.; Studdiblane, W.H.; Prusiner, S.B.; Doe

DNA 5, 315-324, 1986

A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173

A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PIDN:AAA60182.1; PID:G190468

R/Puckett, C.; Concanon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 330-329, 1991

A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:91328137; PMID:1678248

A/Accession: A40372

A/Status: not compared with conceptual translation

A/Molecule type: DNA

A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G747846; PIDN:CAA8442.1; PID:G747847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

R, Liao, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A:Reference number: A05017; MUID:86261778; PMID:3014653
 A:Accession: A05017
 A:Molecule type: mRNA
 A:Residues: 8-117, 119-253 <LTA>
 A:Cross-references: GB:D00015; NID:g2220015; PIDN:BA00011.1; PID:g2220016; GB:M13667; NID:EMBO J. 10, 513-519, 1991
 A:Title: Amyloid protein of Gerstmann-Strausseier-Scheinker disease (Indiana kindred) is A:Reference number: S14078; MUID:91160504; PMID:1672107
 A:Accession: S14078
 A:Molecule type: protein
 A:Residues: 58-72, 'X', '74-76', 'XX', '79', 'XXX', '83-86', '111-128', 'V', '130-150' <TAG>
 R:Dieckhoff, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
 Hum. Mol. Genet. 1, 443-444, 1992
 A:Title: Deletion in the prion protein gene in a demented patient.
 A:Reference number: S14322; MUID:93250789; PMID:1363802
 A:Accession: S14322
 A:Molecule type: DNA
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Residues: 9-83, 92-240 <RES>
 A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
 A:Accession: S16897
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 8-240 <RES>
 A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
 R:Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.; Neurology 42, 422-427, 1992
 A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutatio A:Reference number: S15835; MUID:92140671; PMID:11736177
 A:Accession: S15835
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 51-91, 'PHGGGMCQPHGGGMCQPHGGGMCQPHGGGMCQPHGGGMCQPHGGG' <RE2>
 A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699
 R:Goldfarb, L.G.; Brown, P.; McComb, W.R.; Goldgaber, D.; Swergold, G.D.; Wills, P.R.; Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
 A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, & A:Reference number: S159184; MUID:92073400; PMID:1683708
 A:Accession: S159184
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 60-67 <COL>
 A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID: C:Genetics:
 A:Gene: GDB:PRNP; CUD; PRIP
 A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
 A:Map position: 20pter-20p12
 A:Note: one intron occurs before the initiator codon
 A:Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler C:Superfamily: major prion protein
 C:KeyWords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy F:1-22/DNA: signal sequence #status predicted <SIG>
 F:23-230/Product: major prion protein #status predicted <MAT>
 F:54-92/Region: 8-residue repeats (P-H-G-G-G-W-G-O)
 F:231-253/DNA: carboxyl-terminal propeptide #status predicted <CRP>
 F:179-214/DNA: sulfide bonds #status predicted
 F:181-197/Binding site: carboxylate (Asn) (covalent) #status predicted
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

RESULT 7

184423
 Major prion protein precursor - rhesus macaque
 C:Species: Macaca mulatta (rhesus macaque)
 C:Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004
 C:Accession: S184423; S53622; S71054
 R:Cerenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental A:Reference number: S13907; MUID:95083661; PMID:7991600
 A:Accession: S18423
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-253 <RES>
 A:Cross-references: UNIPROT:P40254; EMBL:U08307; NID:g595850; PIDN:AAA68635.1; PID:g5958 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53622
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-210, 'R', '212-253' <SCH>
 A:Cross-references: EMBL:U08307
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71054
 A:Molecule type: DNA
 A:Residues: 1-253 <CMW>
 A:Cross-references: UNIPROT:P40254; EMBL:U08307; NID:g474372; PIDN:AAC50095.1; PID:g474373 C:Superfamily: major prion protein
 C:KeyWords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 253;
 Best Local Similarity 97.8%; Pred. No. 3, 4e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 :|||||
 Db 170 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 8
 S71055
 major prion protein - pig-tailed macaque
 C:Species: Macaca nemestrina (pig-tailed macaque)
 C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71055; S53626
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71055
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:g474370; PIDN:AAC50094.1; PID:g4743 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53626
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 8-210, 'R', '212-247' <SCW>
 A:Cross-references: EMBL:U08306
 C:Superfamily: major prion protein
 C:KeyWords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 253;
 Best Local Similarity 97.8%; Pred. No. 3, 4e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 :|||||
 Db 170 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 215

Db

170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 9

137032

Major prion protein precursor - gorilla

C/Species: Gorilla gorilla (gorilla)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 137032

R/Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 137032

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G5632

C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.8%; Score 239; DB 2; Length 253;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 10

A53892

Prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Lilao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LUA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.3%; Score 238; DB 2; Length 226;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 142 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMCV 187

RESULT 11

161848

Major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G5956

C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.3%; Score 238; DB 2; Length 252;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 95.7%; Pred. No. 4.4e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 12

A23544

Major prion protein precursor - mouse

N/Alternate names: PrP; Scrapie prion

C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; 502521; A22315

R/Mestaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; PMID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <WES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/Lm

A/Note: The sequence shown is from the NZW strain; the sequence from the I/Lm strain dif

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; PMID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, U.; Multhaupt, G.; Reekie, L.; J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: 502521; PMID:8816695; PMID:2894984

A/Accession: 502521

A/Molecule type: protein

A/Residues: 1-254 <ROP>

R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur

A/Reference number: A22315; PMID:88213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132; 'V', 134-164 <CHP>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <Sig>

F/23-254/Product: major prion protein #status predicted <Sig>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <WAG>

F/178-213/Disulfide bonds: #status predicted

F/180-196/Binding site: carboxylate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match

Best Local Similarity 95.7%; Score 238; DB 2; Length 254;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 13

S53617

Major prion protein - common gibbon

C/Species: Hylobates lar (common gibbon, white-handed gibbon)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53617; S71050

R/Schneitz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 369-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53614; PMID:95139066; PMID:7837269

A/Molecule type: DNA

A/Residues: 1-254 <WES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/Lm

A/Note: The sequence shown is from the NZW strain; the sequence from the I/Lm strain dif

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; PMID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, U.; Multhaupt, G.; Reekie, L.; J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: 502521; PMID:8816695; PMID:2894984

A/Accession: 502521

A/Molecule type: protein

A/Residues: 1-254 <ROP>

R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur

A/Reference number: A22315; PMID:88213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132; 'V', 134-164 <CHP>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <Sig>

F/23-254/Product: major prion protein #status predicted <Sig>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <WAG>

F/178-213/Disulfide bonds: #status predicted

F/180-196/Binding site: carboxylate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match

Best Local Similarity 95.7%; Score 238; DB 2; Length 254;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMCV 214

A:Accession: S53617
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: UNIPROT:P61766; EMBL:U08299
 R:Scharz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71050
 A:Molecule type: DNA
 A:Residues: 1-210, 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08299; NID:g474356; PIDN:AAC50088.1; PID:g474357
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.9%; Score 237; DB 2; Length 253;
 Best Local Similarity 97.8%; Pred. No. 5,9e-22;
 Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 46
 Db 170 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 215

RESULT 14
 S37137
 prion protein - greater kudu
 C:Species: Tragelaphus strepsiceros (greater kudu)
 C>Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37137
 R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 Submitted to the EMBL Data Library, August 1993
 A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAR>
 A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAAS2781.1; PID:g3989
 C:Superfamily: major prion protein

Query Match 97.9%; Score 237; DB 2; Length 264;
 Best Local Similarity 93.5%; Pred. No. 6.2e-22;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 46
 Db 181 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 226

RESULT 15
 S71041
 major prion protein - black-handed spider monkey (fragment)
 C:Species: Atelates Geoffroyi (black-handed spider monkey)
 C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71041; S53630
 R:Scharz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>
 A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g4743
 R:Scharz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53630
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194, 'R', 196-231 <SCW>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.5%; Score 236; DB 2; Length 232;
 Best Local Similarity 95.7%; Pred. No. 7.2e-22;
 Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 46
 Db 154 SSQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC 199

Search completed: December 3, 2004, 00:38:38
 Job time: 13.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Sequence: 1 SSQNNFVHDCVNTTKQHTV.....ENFTEDVAMKERVQKCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt 02:.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	242	100.0	253	PRIO_HYLLA	P61766 hylobates 1
2	242	100.0	253	PRIO_HYLLA	P61766 hylobates 1
3	242	100.0	253	PRIO_PANTR	P61768 pan troglod
4	239	98.8	238	PRIO_CERAT	Q95145 cercocebus
5	239	98.8	238	PRIO_THRGE	Q95270 theropithec
6	239	98.8	238	Q66XEL	Q66XEL homo sapien
7	239	98.8	241	PRIO_CALMO	P40248 callicebus
8	239	98.8	241	PRIO_MANSP	P40255 mandrillus
9	239	98.8	245	PRIO_CERAE	P40250 cercopithec
10	239	98.8	246	PRIO_CERNO	P61761 cercopithec
11	239	98.8	246	PRIO_CERNE	P61762 cercopithec
12	239	98.8	246	PRIO_CERNO	Q95174 erythrocebu
13	239	98.8	246	PRIO_ERIPA	AA083636 homo sapi
14	239	98.8	246	PRIO_CERAE	AA083636 homo sapi
15	239	98.8	252	PRIO_CERAP	P40249 colobus apell
16	239	98.8	253	PRIO_COLGU	P40251 colobus gue
17	239	98.8	253	PRIO_GORGO	P40252 gorilla gor
18	239	98.8	253	PRIO_HUMAN	P40254 macaca fasc
19	239	98.8	253	PRIO_PANCA	P40256 macaca fasc
20	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
21	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
22	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
23	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
24	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
25	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
26	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
27	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
28	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
29	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
30	239	98.8	253	PRIO_PONPY	P40257 pongo pygma
31	239	98.8	253	PRIO_PONPY	P40257 pongo pygma

32	238	98.3	254	PRIO_RAT	P13852 ratius norv
33	238	98.3	254	Q8VHV6	Q8VHV6 apodemus by
34	238	98.3	254	AA019933	AA019933 ratius no
35	238	98.3	260	PRIO_SALISC	P40258 salmtri sci
36	237	97.9	220	Q866W7	Q866W7 ochotona pr
37	237	97.9	226	Q97907	Q97907 gazella sub
38	237	97.9	227	Q97909	Q97909 tragelaphus
39	237	97.9	256	PRP2_TPAST	P40243 tragelaphus
40	237	97.9	256	Q866V2	Q866V2 trichechus
41	237	97.9	264	PRP1_TPAST	P40242 tragelaphus
42	236	97.5	232	PRIO_ATEGB	P40246 atelates geof
43	236	97.5	252	PRIO_CALUA	P40247 callitrichix
44	235	97.1	239	PRIO_AOTTR	P40245 aotus trivi
45	235	97.1	240	Q8VHV4	Q8VHV4 microtus ag

ALIGNMENTS

RESULT 1
PRIO_HYLLA STANDARD; PRT; 253 AA.
ID PRIO_HYLLA
AC P61766; P40253;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrP;
OS Hylobates lar (Common gibbon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
OX NCBI_TaxID=9580;
RN [1]
RP MEDLINE=5139066; PubMed=7837269;
RX Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RA "Prion protein gene variation among primates."
RT J. Mol. Biol. 245:362-374(1995).
RL
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U08299; AAC50088.1; -;
CC PIR; S53617; S53617.
CC HSSP; P04156; 114M.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion Octapep; 6.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC GLYCOPROTEIN; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL
CC CHAIN 23 230
CC PROPEP 231 253
CC LIPID 230 230
CC
CC Major prion protein.
CC Removed in mature form (By similarity).
CC GPI-anchor amidated serine (By similarity).
CC

FT DISULFID 179 214 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 SQ SEQUENCE 253 AA; 27633 MW; C8F859F040996B74 CRC64;

Query Match 100.0%; Score 242; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
 DB 170 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 2

ID PRIOR_HYLSY STANDARD; PRT; 253 AA.
 AC P61767; P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Pp23-35C).
 GN Name=PRNP;
 OS Hylobates syndactylus (Siamang) (Symphalangus syndactylus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
 NC NCBI_TaxID=9590;
 RN [1]

SEQUENCE FROM N.A.

RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).

-1- FUNCTION: The function of Prp is not known. Prp is encoded in the

-1- host genome and is expressed both in normal and infected cells.
 "rod".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 Animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

(GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
 -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U08308; AAC50096.1; -
 DR PIR; S53635; S53635.
 DR HSSP; P04156; IIAW.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

FT SIGNAL 1 22 By similarity.
 FT CHAIN 23 230 Major prion protein.
 FT PROPEP 231 253 Removed in mature form (By similarity).

FT LIPID 230 230 GPI-anchor amidated serine (By
 FT DISULFID 179 214 similarity).
 FT CARBOHYD 181 181 By similarity.
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 SQ SEQUENCE 253 AA; 27633 MW; C8F859F040996B74 CRC64;

Query Match 100.0%; Score 242; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
 DB 170 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 3

ID PRIOR_PANTR STANDARD; PRT; 253 AA.
 AC P61768; P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Pp23-35C).
 GN Name=PRNP;
 OS Pan troglodytes (Chimpanzee).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Pan.
 NC NCBI_TaxID=9598;
 RN [1]

SEQUENCE FROM N.A.

RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).

-1- FUNCTION: The function of Prp is not known. Prp is encoded in the

-1- host genome and is expressed both in normal and infected cells.
 "rod".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 Animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

(GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
 -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U08296; AAC50085.1; -
 DR EMBL; U15039; AAA68632.1; -

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DR PIR; I61847, I61847.
DR HSSP; P04156; 114M.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 230
FT PROPEP 231 253
FT LIPID 230 230
FT DISULFID 179 214
FT CARBOHYD 181 181
FT CARBOHYD 197 197
FT DOMAIN 51 91
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 84 91
SQ SEQUENCE 253 AA; 27633 MW; CR8F59F040996B74 CRC64;

Query Match 100.0%; Score 242; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 2e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNPFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 170 SSQNPFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 4
PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (P1P27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercocebus atterimus, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=36222, 9546;
[1]
SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75384; AAB50623.1; -.
CC DR EMBL; U75382; AAB50623.1; -.
CC DR HSSP; P23907; IG04.
CC DR InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 215
FT PROPEP 216 238
FT LIPID 215 215
FT DISULFID 164 199
FT CARBOHYD 166 166
FT CARBOHYD 182 182
FT DOMAIN 44 76
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E3531B CRC64;

Query Match 98.8%; Score 239; DB 1; Length 238;
Best Local Similarity 97.8%; Pred. No. 4.4e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNPFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 155 SSQNPFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 200

RESULT 5
PRIO_THEGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (P1P27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
NCBI_TaxID=9565;
[1]
SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL; U75383; AAC50630.1; -

DR HSP; P23907; IG04.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 5.

DR PRINTS; PR00341; Prion

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

FT DOMAIN

FT REPEAT

FT REPEAT

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Query Match 98.8%; Score 239; DB 1; Length 238;
Best Local Similarity 97.8%; Pred. No. 4.4e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

DR EMBL; U75383; AAC50630.1; -

DR HSP; P23907; IG04.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 5.

DR PRINTS; PR00341; Prion

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

FT DOMAIN

FT REPEAT

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FT NON_TER

Query Match 98.8%; Score 239; DB 2; Length 238;
Best Local Similarity 97.8%; Pred. No. 4.4e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

DR EMBL; U75383; AAC50630.1; -

DR HSP; P23907; IG04.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 5.

DR PRINTS; PR00341; Prion

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

FT DOMAIN

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FT NON_TER

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FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 241;
Best Local Similarity 97.8%; Pred. No. 4.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 SSONNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCI 46
Db 163 SNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCI 208

RESULT 8
PRIO_MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Mandrilus sphinx (Mandril) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Mandrillus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08303; AAC50091.1; -.
DR PIR; S71056; S71056.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 >241
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174

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FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 98.8%; Score 239; DB 1; Length 241;
Best Local Similarity 97.8%; Pred. No. 4.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 SSONNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCI 46
Db 163 SNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCI 208

RESULT 9
PRIO_CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08291; AAC50080.1; -.
DR EMBL; U08292; AAC50081.1; -.
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT SIGNAL 1 22 By similarity.
FT CHAIN 23 222 Major prion protein.
FT PROPEP 223 245 Removed in mature form (By similarity).
FT LIPID 222 GPI-anchor amidated serine (By
FT DISULFID 171 206 By similarity.
FT CARBOHYD 173 173 N-linked (GLCNAC... ) (Potential).
FT CARBOHYD 189 189 N-linked (GLCNAC... ) (Potential).
FT DOMAIN 51 83 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 59 0.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT REPEAT 76 83 3.
SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 98.8%; Score 239; DB 1; Length 245;
Best Local Similarity 97.8%; Pred. No. 4.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 163 SNONNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQMC 207

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RESULT 10
PRIO_CERMO STANDARD; PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
OS Name=PRNP;
OC Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75386; AAB50625.1; -.
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR03991; Prion_octapep; 6.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.

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KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 246 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GLCNAC... ) (Potential).
FT CARBOHYD 190 190 N-linked (GLCNAC... ) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FD03 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 246;
Best Local Similarity 97.8%; Pred. No. 4.6e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 163 SNONNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQMC 208

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RESULT 11
PRIO_CERMO STANDARD; PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
OS Name=PRNP;
OC Cercopithecus neglectus (DeBrazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75387; AAB50626.1; -.
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR03991; Prion_octapep; 6.

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DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 835D147CA2B4PDD3 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 246;
Best Local Similarity 97.8%; Pred. No. 4.6e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SSONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
Db 163 SNONFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 208

RESULT 12
PRIO_CERTO STANDARD; PRT; 246 AA.
ID PRIO_CERTO
AC 095176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name:PrP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
"rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
animals infected with the degenerative neurological diseases kuru,
Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
(GSS), scrapie, bovine spongiform encephalopathy (BSE),
transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL; U75385; AAB50628.1; -.
CC HSSP; P23907; IG04.

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DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03891; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADC7 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 246;
Best Local Similarity 97.8%; Pred. No. 4.6e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SSONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 46
Db 163 SNONFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMC1 208

RESULT 13
PRIO_ERYPA STANDARD; PRT; 246 AA.
ID PRIO_ERYPA
AC 095174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name:PrNP;
OS Erythrocybus pataas (Red guenon) (Cercopithecus pataas).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Erythrocybus.
OX NCBI_TaxID=9538;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
"rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
animals infected with the degenerative neurological diseases kuru,
Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
(GSS), scrapie, bovine spongiform encephalopathy (BSE),
transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL; U75385; AAB50628.1; -.
CC HSSP; P23907; IG04.

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CC EMBL; U75388; AAB50627.1; -.
DR HSSP; P23907; 1G04.
DR InterPro; IPRO00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00344; Prion; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26886 MW; D35D105BBEC53108 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 1; Length 246;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 46
DB 163 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 208

RESULT 14
AAO83636 PRELIMINARY; PRT; 246 AA.
AC AAO83636;
DT 02-MAR-2004 (TEMBLrel. 27, Created)
DT 02-MAR-2004 (TEMBLrel. 27, Last sequence update)
DE 02-MAR-2004 (TEMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
KW EMBL; AY219883; AAO83636.1; -.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26886 MW; 309B1B13C8841566 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 2; Length 246;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 46
DB 163 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 208

RESULT 15
PRIO_CEBAP STANDARD; PRT; 252 AA.

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AC P40249;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP.
OS Cebus apella (Brown-capped capuchin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
OX NCBI_TaxID=9515;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISRUPT: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08295; AAC50084.1; -.
DR PIR; S53631; S53631.
DR HSSP; P23907; 1G04.
DR InterPro; IPRO00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion; 6.
DR PRINTS; PR00344; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 1; Length 252;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 46
DB 169 SSONNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCI 214

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Fri Dec 3 10:54:05 2004

us-10-031-975-2_copy_176_221.rup

Page 9

Job time : 74.3541 secs

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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNTTKQHTV.....ENFTEDVAMERVVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: /cgnt2_6/ptodata/1/iaa/5A.COMB.pep.*
2: /cgnt2_6/ptodata/1/iaa/5B.COMB.pep.*
3: /cgnt2_6/ptodata/1/iaa/6A.COMB.pep.*
4: /cgnt2_6/ptodata/1/iaa/6B.COMB.pep.*
5: /cgnt2_6/ptodata/1/iaa/PCOTUS.COMB.pep.*
6: /cgnt2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	242	100.0	253	4	US-09-431-887-2
2	242	100.0	253	4	US-09-431-887-8
3	242	100.0	253	4	US-09-431-887-19
4	239	98.8	142	1	US-08-556-823-10
5	239	98.8	245	4	US-09-431-887-5
6	239	98.8	245	4	US-09-431-887-15
7	239	98.8	252	4	US-09-431-887-17
8	239	98.8	253	1	US-08-242-188-2
9	239	98.8	253	1	US-08-509-261A-2
10	239	98.8	253	1	US-08-660-626-8
11	239	98.8	253	1	US-08-692-892-2
12	239	98.8	253	2	US-08-713-939A-2
13	239	98.8	253	2	US-08-868-162A-22
14	239	98.8	253	2	US-09-031-168-8
15	239	98.8	253	3	US-09-128-450-20
16	239	98.8	253	3	US-09-036-579-2
17	239	98.8	253	3	US-09-823-494-20
18	239	98.8	253	3	US-09-550-374-2
19	239	98.8	253	4	US-09-431-887-1
20	239	98.8	253	4	US-09-431-887-3
21	239	98.8	253	4	US-09-431-887-4
22	239	98.8	253	4	US-09-431-887-7
23	239	98.8	253	4	US-09-431-887-9
24	239	98.8	253	4	US-09-431-887-10
25	239	98.8	253	4	US-09-431-887-11
26	239	98.8	253	4	US-09-431-887-12
27	239	98.8	253	4	US-09-431-887-14

28	239	98.8	253	4	US-09-431-887-16	Sequence 16, Appl
29	239	98.8	253	4	US-09-431-887-18	Sequence 18, Appl
30	239	98.8	253	4	US-09-943-906-2	Sequence 2, Appl
31	239	98.8	253	4	US-09-669-516C-8	Sequence 8, Appl
32	239	98.8	253	4	US-09-919-172-57	Sequence 57, Appl
33	239	98.8	253	4	US-09-976-594-72	Sequence 72, Appl
34	239	98.8	253	4	US-09-904-987-3	Sequence 3, Appl
35	239	98.8	254	1	US-08-242-188-1	Sequence 1, Appl
36	238	98.3	254	1	US-08-509-261A-1	Sequence 1, Appl
37	238	98.3	254	1	US-08-692-892-1	Sequence 7, Appl
38	238	98.3	254	1	US-08-660-626-7	Sequence 1, Appl
39	238	98.3	254	2	US-08-713-939A-1	Sequence 1, Appl
40	238	98.3	254	2	US-08-868-162A-21	Sequence 21, Appl
41	238	98.3	254	3	US-09-031-168-7	Sequence 7, Appl
42	238	98.3	254	3	US-09-128-450-19	Sequence 19, Appl
43	238	98.3	254	3	US-09-128-450-28	Sequence 28, Appl
44	238	98.3	254	3	US-09-036-579-1	Sequence 1, Appl
45	238	98.3	254	3	US-09-823-494-19	Sequence 19, Appl

ALIGNMENTS

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RESULT 1
US-09-431-887-2
; Sequence 2, Application US/09431887
; Patent No. 6534036
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Pan troglodytes
US-09-431-887-2

Query Match      100.0%; Score 242; DB 4; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,8e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 SSQNNFVHDCVNTTKQHTVTTTGTGKGFETDVKKMERVVEQNCI 46
DB      170 SSQNNFVHDCVNTTKQHTVTTTGTGKGFETDVKKMERVVEQNCI 215

RESULT 2
US-09-431-887-8
; Sequence 8, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Hylobates sp.
US-09-431-887-8

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Query Match 100.0%; Score 242; DB 4; Length 253;
 Best Local Similarity 100.0%; Pred. No. 9.8e-26;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 3

US-09-431-887-19
 ; Sequence 19, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:

APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 19
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Hylobates syndactylus

US-09-431-887-19

Query Match 100.0%; Score 242; DB 4; Length 253;
 Best Local Similarity 100.0%; Pred. No. 9.8e-26;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 4

US-08-556-823-10
 ; Sequence 10, Application US/08556823
 ; Patent No. 5750361
 ; GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner
 APPLICANT: Kiyotoshi Kaneko
 APPLICANT: Fred R. Cohen
 TITLE OF INVENTION: Formation and use of prion protein
 NUMBER OF SEQUENCES: 10
 CORRESPONDENCE ADDRESS:
 ADDRESS: Fish & Richardson
 STREET: 2200 Sand Hill Road, Suite 100
 CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Ascliti
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/556,823
 FILING DATE:

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Valetta Gregg

REGISTRATION NUMBER: 35,127

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-556-823-10

Query Match

Best Local Similarity 98.8%; Score 239; DB 1; Length 142;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 81 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
 81 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 5

US-09-431-887-5
 ; Sequence 5, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:

APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 5
 LENGTH: 245
 TYPE: PRT
 ORGANISM: Cercopithecus aethiops

US-09-431-887-5

Query Match 98.8%; Score 239; DB 4; Length 245;
 Best Local Similarity 97.8%; Pred. No. 2.5e-25;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 162 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
 162 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 6

US-09-431-887-15
 ; Sequence 15, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:

APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 15
 LENGTH: 245
 TYPE: PRT
 ORGANISM: Cercopithecus diana

US-09-431-887-15

Query Match 98.8%; Score 239; DB 4; Length 245;
 Best Local Similarity 97.8%; Pred. No. 2.5e-25;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 46
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Db 162 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 207

RESULT 7
US-09-431-887-17
Sequence 17, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 17
LENGTH: 252
TYPE: PR1
ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 98.8%; Score 239; DB 4; Length 252;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 169 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 214

RESULT 8
US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicovic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242.188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicovic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 98.8%; Score 239; DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 170 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 215

RESULT 9
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicovic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicovic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2

Query Match 98.8%; Score 239; DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 170 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQMC1 215

RESULT 10
US-08-660-626-8

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/ Sequence 8, Application US/08660626
/ Patent No. 5789655
/ GENERAL INFORMATION:
/ APPLICANT: Stanley B. Prusiner
/ APPLICANT: Glenn C. Telling
/ APPLICANT: Fred B. Cohen
/ APPLICANT: Michael R. Scott
/ TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
/ NUMBER OF SEQUENCES: 13
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson
/ STREET: 2200 Sand Hill Road, Suite 100
/ CITY: Menlo Park
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94025
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: floppy disk
/ OPERATING SYSTEM: IBM PC compatible
/ SOFTWARE: PC-DOS/MS-DOS
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/660,626
/ FILING DATE:
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Valeta Gregg
/ REGISTRATION NUMBER: 35,127
/ REFERENCE/DOCKET NUMBER: 07532/003001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 322-5070
/ TELEFAX: (415) 854-0875
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 253 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ ORIGINAL SOURCE:
/ ORGANISM: HUMAN PRION PROTEIN, HuPrp
/ US-08-660-626-8

Query Match          98.8%; Score 239, DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Cy 1 SSNNFVHDCNITIKQHTVTTTKGNFTETDVKKMERVVEQMC1 46
Db 170 SNQNFVHDCNITIKQHTVTTTKGNFTETDVKKMERVVEQMC1 215

RESULT 11
/ Sequence 2, Application US/08692892
/ Patent No. 5792901
/ GENERAL INFORMATION:
/ APPLICANT: Prusiner, Stanley B.
/ APPLICANT: Scott, Michael R.
/ APPLICANT: Telling, Glenn
/ TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
/ NUMBER OF SEQUENCES: 4
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Karl Bozicevic
/ STREET: 2200 Sand Hill Road
/ CITY: Menlo Park
/ STATE: CA
/ COUNTRY: USA
/ ZIP: 94025
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: floppy disk
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/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/692,892
/ FILING DATE: 30-JULY-1996
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Bozicevic, Karl
/ REGISTRATION NUMBER: 28,807
/ REFERENCE/DOCKET NUMBER: 06510/056001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 322-5070
/ TELEFAX: (415) 854-0875
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 253 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: peptide
/ ORIGINAL SOURCE:
/ ORGANISM: HUMAN PRION PROTEIN, HuPrp
/ US-08-692-892-2

Query Match          98.8%; Score 239, DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Cy 1 SSNNFVHDCNITIKQHTVTTTKGNFTETDVKKMERVVEQMC1 46
Db 170 SNQNFVHDCNITIKQHTVTTTKGNFTETDVKKMERVVEQMC1 215

RESULT 12
/ Sequence 2, Application US/08713939A
/ Patent No. 5846533
/ GENERAL INFORMATION:
/ APPLICANT: Prusiner, Stanley B.
/ APPLICANT: Williamson, R. Anthony
/ APPLICANT: Burton, Dennis R.
/ TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
/ NUMBER OF SEQUENCES: 86
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson P.C.
/ STREET: 2200 Sand Hill Road
/ CITY: Menlo Park
/ STATE: CA
/ COUNTRY: U.S.A.
/ ZIP: 94025
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ OPERATING SYSTEM: IBM compatible
/ SOFTWARE: FASTSEQ Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/713,939A
/ FILING DATE: 13-SEP-1996
/ CLASSIFICATION: 436
/ PRIOR APPLICATION NUMBER:
/ APPLICATION NUMBER:
/ FILING DATE:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Bozicevic, Karl
/ REGISTRATION NUMBER: 28,807
/ REFERENCE/DOCKET NUMBER: 06510/059001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 415-854-5277
/ TELEFAX: 415-854-0875
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
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LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 98.8%; Score 239; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 13

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 596269

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESSES:
ADDRESS: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231

TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 98.8%; Score 239; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 14

US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIITOP-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESS: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Acclii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 98.8%; Score 239; DB 3; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 15

US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149

GENERAL INFORMATION:
APPLICANT: Cheesbro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Subette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450

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; CURRENT FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-128-450-20

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Query Match      98.8%; Score 239; DB 3; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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DB      170 SNNNFVHDCVNTTTHKQHTVTTTGGNFETEDVQMERVVEQWCI 215

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Search completed: December 3, 2004, 00:18:55
 Job time : 17.4197 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNITIKQHTV.....ENFTEDVKKMERVVEQWCI 46

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356523098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*
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19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pdp:*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pdp:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	242	100.0	253	14 US-10-304-630-2	Sequence 2, Appl1
2	242	100.0	253	14 US-10-304-630-8	Sequence 8, Appl1
3	242	100.0	253	14 US-10-304-630-19	Sequence 19, Appl1
4	242	100.0	254	14 US-10-301-488A-23	Sequence 23, Appl1
5	242	100.0	254	15 US-10-301-448-23	Sequence 23, Appl1
6	239	98.8	117	14 US-10-050-902-348	Sequence 348, App
7	239	98.8	117	14 US-10-050-898-348	Sequence 348, App
8	239	98.8	117	14 US-10-346-190-89	Sequence 89, Appl1
9	239	98.8	141	16 US-10-612-356A-1	Sequence 1, Appl1
10	239	98.8	162	9 US-09-745-003-10	Sequence 10, Appl1
11	239	98.8	163	14 US-10-104-047-2013	Sequence 2013, Ap
12	239	98.8	200	16 US-10-470-848-10	Sequence 10, Appl1
13	239	98.8	208	16 US-10-470-848-3	Sequence 3, Appl1

14	239	98.8	208	17 US-10-745-393-1	Sequence 1, Appl1
15	239	98.8	245	14 US-10-304-630-5	Sequence 5, Appl1
16	239	98.8	245	14 US-10-304-630-15	Sequence 15, Appl1
17	239	98.8	252	14 US-10-304-630-17	Sequence 17, Appl1
18	239	98.8	253	9 US-09-823-494-20	Sequence 20, Appl1
19	239	98.8	253	9 US-09-904-987-3	Sequence 3, Appl1
20	239	98.8	253	9 US-09-919-172-57	Sequence 57, Appl1
21	239	98.8	253	9 US-09-943-906-2	Sequence 2, Appl1
22	239	98.8	253	14 US-10-304-630-1	Sequence 1, Appl1
23	239	98.8	253	14 US-10-304-630-3	Sequence 3, Appl1
24	239	98.8	253	14 US-10-304-630-4	Sequence 4, Appl1
25	239	98.8	253	14 US-10-304-630-7	Sequence 7, Appl1
26	239	98.8	253	14 US-10-304-630-9	Sequence 9, Appl1
27	239	98.8	253	14 US-10-304-630-10	Sequence 10, Appl1
28	239	98.8	253	14 US-10-304-630-11	Sequence 11, Appl1
29	239	98.8	253	14 US-10-304-630-12	Sequence 12, Appl1
30	239	98.8	253	14 US-10-304-630-14	Sequence 14, Appl1
31	239	98.8	253	14 US-10-304-630-16	Sequence 16, Appl1
32	239	98.8	253	14 US-10-304-630-18	Sequence 18, Appl1
33	239	98.8	253	14 US-10-301-488A-21	Sequence 21, Appl1
34	239	98.8	253	14 US-10-301-488A-32	Sequence 32, Appl1
35	239	98.8	253	14 US-10-301-488A-32	Sequence 32, Appl1
36	239	98.8	253	14 US-10-410-907A-8	Sequence 8, Appl1
37	239	98.8	253	14 US-10-346-190-79	Sequence 79, Appl1
38	239	98.8	253	14 US-10-435-602-2	Sequence 2, Appl1
39	239	98.8	253	15 US-10-301-448-21	Sequence 21, Appl1
40	239	98.8	253	15 US-10-301-448-22	Sequence 22, Appl1
41	239	98.8	253	15 US-10-301-448-32	Sequence 32, Appl1
42	239	98.8	253	16 US-10-648-593-151	Sequence 151, App
43	239	98.8	253	16 US-10-470-848-2	Sequence 2, Appl1
44	239	98.8	253	16 US-10-772-656-54	Sequence 54, Appl1
45	239	98.8	592	17 US-10-745-393-3	Sequence 3, Appl1

ALIGNMENTS

RESULT 1
US-10-304-630-2
; Sequence 2, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OR INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02 9824091.4
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Pan troglodytes
US-10-304-630-2

Query Match 100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 SSQNNFVHDCVNITIKQHTVTTTGGFTEDVKKMERVVEQWCI 46
170 SSQNNFVHDCVNITIKQHTVTTTGGFTEDVKKMERVVEQWCI 215

RESULT 2
US-10-304-630-8
; Sequence 8, Application US/10304630
; Publication No. US20030161836A1

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; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Hylobates sp.
US-10-304-630-8

Query Match          100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 3
US-10-304-630-19
; Sequence 19, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Hylobates syndactylus
US-10-304-630-19

Query Match          100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 4
US-10-301-488A-23
; Sequence 23, Application US/10301488A
; Publication No. US2003016558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blae
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Binar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1

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; CURRENT APPLICATION NUMBER: US/10/301,488A
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 23
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Chimpanzee
US-10-301-488A-23

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Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 5
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tiesoc, Alain
; APPLICANT: Maurel, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Ploese, Christine
; TITLE OF INVENTION: MOLECULAR Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19

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PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentln Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 7
US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003015711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentln Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 8

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentln version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 9
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentln version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 98.8%; Score 239; DB 16; Length 141;
Best Local Similarity 97.8%; Pred. No. 1.1e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 81 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 10
US-09-745-003-10
Sequence 10, Application US/09745003

Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins, Related Reagents
FILE REFERENCE: PEP2
CURRENT APPLICATION NUMBER: US/09/745,003
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match
Best Local Similarity 98.8%; Score 239; DB 9; Length 162;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 79 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 124

RESULT 11
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
PRIOR FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2013
LENGTH: 163
TYPE: PRT
ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 98.8%; Score 239; DB 14; Length 163;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 80 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 125

RESULT 12
US-10-470-848-10
Sequence 10, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCF
CURRENT APPLICATION NUMBER: US/10/470,848
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 200
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 98.8%; Score 239; DB 16; Length 200;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 140 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 185

RESULT 13
US-10-470-848-3
Sequence 3, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCF
CURRENT APPLICATION NUMBER: US/10/470,848
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 98.8%; Score 239; DB 16; Length 208;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 148 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 193

RESULT 14
US-10-745-393-1
Sequence 1, Application US/10745393
Publication No. US20040203131A1
GENERAL INFORMATION:
APPLICANT: Faatz, Elke
APPLICANT: Stock, Werner
APPLICANT: Scharschmidt, Peter
TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
FILE REFERENCE: 12290 US3 (9793/141)
CURRENT APPLICATION NUMBER: US/10/745,393
PRIOR FILING DATE: 2003-12-23
PRIOR APPLICATION NUMBER: EP 0115225.3
PRIOR FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: EP 01120939.2
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 10/167,774
PRIOR FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US 10/179,905
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 98.8%; Score 239; DB 17; Length 208;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46

Db 148 SNQNNFVHDCVNITIKQHTVTTTGGENFTETDVKMMERVVEQMC1 193

RESULT 15

US-10-304-630-5
; Sequence 5, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-10-304-630-5

Query Match 98.8%; Score 239; DB 14; Length 245;
Best Local Similarity 97.8%; Pred. No. 2.2e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGENFTETDVKMMERVVEQMC1 46
162 SNQNNFVHDCVNITIKQHTVTTTGGENFTETDVKMMERVVEQMC1 207

Search completed: December 3, 2004, 01:07:45
Job time : 55.4459 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNPFVHDCVNIITIKQHTVTTTGTGENTETDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_235sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mpr
5	193	100.0	124	5	ABG80652 Mouse tru
6	193	100.0	124	7	ADD24200 mPr-Pt-EK-
7	193	100.0	142	7	AAW17686 Priton pro
8	193	100.0	163	7	ADB63859 Human pri
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	ABAB07316 Human pri
11	193	100.0	208	3	ABAB07318 Human pri
12	193	100.0	208	3	ABAB07327 Mouse pri
13	193	100.0	208	3	ABAB07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-t
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	5	ABG31905 HCHV type
18	193	100.0	211	4	AAAB30801 Amto aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Rat prion
21	193	100.0	245	4	AAAB72342 Monkey pr
22	193	100.0	245	4	AAAB72352 Cercopith
23	193	100.0	253	2	AAAB6715 Human pri
24	193	100.0	253	2	AAAB69660 Human pri
25	193	100.0	253	2	AAAB85901 Human pri

26	193	100.0	253	2	AAAY07994 Human pri
27	193	100.0	253	3	AAAB1485 Human pri
28	193	100.0	253	3	AAAB06272 Human pri
29	193	100.0	253	3	AAAB15035 Human pri
30	193	100.0	253	4	AAAB72339 Chimpanze
31	193	100.0	253	4	AAAB72347 Priton pro
32	193	100.0	253	4	AAAB72353 Guezeza p
33	193	100.0	253	4	AAAB72344 Rhesus mo
34	193	100.0	253	4	AAAB72345 Gibbon pr
35	193	100.0	253	4	AAAB72350 Marmoset
36	193	100.0	253	4	AAAB72351 Hamadryas
37	193	100.0	253	4	AAAB72348 Priton pro
38	193	100.0	253	4	AAAB72356 Siamaing p
39	193	100.0	253	4	AAAB72346 Priton pro
40	193	100.0	253	4	AAAB72355 Priton pro
41	193	100.0	253	4	AAAB72349 Priton pro
42	193	100.0	253	4	AAAB72340 Orangutan
43	193	100.0	253	4	AAAB72338 Human pri
44	193	100.0	253	4	AAAB72354 Capuchin
45	193	100.0	253	4	AAAB72341 Gorilla p

ALIGNMENTS

RESULT 1
ID ABG94357 standard; protein; 117 AA.

AC ABG94357;

DT 10-DEC-2002 (first entry)

DE Modified human prion protein fragment.

KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytotoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;

KW vaccine; infectious disease.

XX Homo sapiens.

XX WO200256905-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002WO-1B000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tisbet A, Maurer P, Lechner F, Sebbel P;

XX Ploesek C;

XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious

XX diseases.

XX Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comprising a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an organism comprising at least one first attachment site, where the organism is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC scaffold site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant beta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC

SO Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 87

RESULT 2

ABG80669

ID ABG80669 standard; protein; 117 AA.

XX ABG80669;

DT 29-NOV-2002 (first entry)

DE Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mitein;
 XX adult respiratory distress syndrome; AIDS; Crohn's disease; adult
 XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 XX Grave's disease; systemic lupus erythematosus; osteoporosis;
 XX inflammatory immune disease; lymphadenopathy; multiple sclerosis;
 XX angiotumproliferative disease; lymphadenopathy; Alzheimer's disease;
 XX rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
 XX enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.

PR 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326988P.

PR 07-NOV-2001; 2001US-0331045P.

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTM) ORTMANN R.

PA (LUBO) LUBOWITZ R.

PA (STAU) STAUFENBIEL M.

PA (FREY) FREY P.

PI Maurer P, Lechner F, Ortman R, Lubow R, Staufenbiel M, Frey P,

PI Renner MA, Bachmann M, Tissot A, Seibel P, Ploesek C;
 XX WPI; 2002-636514/68.

DR Molecular antigen array used in the production of vaccines for infectious

PT diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigenic determinant at least one first attachment
 CC site, where the antigenic determinant is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigenic determinant is connected to
 CC the second attachment site by at least one non-peptide bond; and (c) a
 CC attachment site selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, 192-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiotumproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

SO Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 87

RESULT 3

ADD24196

AC ADD24196 standard; protein; 117 AA.

XX ADD24196;

DT 15-JAN-2004 (first entry)

DE Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;

XX first attachment site; antigen; antigenic determinant; prion protein;

XX PpP; PpP peptide; vaccine; neuroprotective; anti-inflammatory;

XX Creutzfeldt-Jakob Disease; prion; mutant; mitein.

OS Synthetic.

PN WO2003059386-A2.

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Felliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTTTTGGNFETDVKMER 36
 DB 52 NNFVHDCVNITIKQHTTTTGGNFETDVKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000166.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Piossek C;
 XX WPI; 2002-627351/67.
 DR
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the association to form an ordered and
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capid which comprises mutant Obeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic, used in
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTTTTGGNFETDVKMER 36
 DB 53 NNFVHDCVNITIKQHTTTTGGNFETDVKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutagen;
 KM graft versus host disease; 19E-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; AIDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS
 XX

PN W0200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 XX 04-MAY-2001; 2001US-0286549P.
 PR 05-OCT-2001; 2001US-0326986P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUEO) LUEOBEND R.
 PA (STAU) STAUFENBIEL M.
 XX (FREY) FREY P.
 PI Maurer P, Lechner F, Ortmann R, Lueobend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tiesoc A, Seibel P, Ploesek C;
 DR WPI; 2002-636514/56.
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7, Page 415; 418pp; English.
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organizer comprising at least one first attachment
 CC site, where the organizer is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; and (c) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site, and
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igs-mediated allergic reactions, anaphylaxis, adult
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angiodysplasia, multiple sclerosis, Alzheimer's disease,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVHCNITIKOHTVTTTGGNFETDVKKMER 36
 DB 53 NNFDVHCNITIKOHTVTTTGGNFETDVKKMER 88

RESULT 6
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrP-EK-Fc+ cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc+.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN W02003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 PI WPI; 2003-598483/56.
 DR
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.,
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g., RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc+)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVHCNITIKOHTVTTTGGNFETDVKKMER 36
 DB 53 NNFDVHCNITIKOHTVTTTGGNFETDVKKMER 88
 RESULT 7
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JAN-1998 (first entry)
XX
DE Prion protein peptide Hu 90-231.
XX
XX Prion protein; PrP, alpha helical domain; screening; inhibition; binding;
KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
XX Gerstmann-Strausler-Scheinker disease; hamster; human.
XX
OS Homo sapiens.
XX
PN MO9716728-A1.
XX
PD 09-MAY-1997.
XX
XX 28-OCT-1996; 96MO-US017462.
PF
XX 02-NOV-1995; 95US-00556623.
PR
XX (REGC) UNIV CALIFORNIA.
PA
PI Prusiner SB, Kaneko K, Cohen FE;
XX
XX WPI; 1997-272248/24.
DR
XX
XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
PT assays for screening compounds able to inhibit or decrease the binding of
PT PrP peptide(s) to cellular prion proteins or peptide(s).
XX
XX Claim 11; Page 7-38; 50pp; English.
XX
XX The present sequence represents a prion protein (PrP) peptide. PrP has an
CC ability to induce a conformational change in cellular prion protein (PrP-
CC c). Methods, for screening compounds which inhibit the binding of PrP-c
CC to a PrP peptide, are used for screening for drugs that may be useful in
CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
XX
SQ Sequence 142 AA;
Query Match 100.0%; Score 193; DB 2; Length 142;
Best Local Similarity 100.0%; Pred. No. 9.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 84 NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 119
RESULT 8
ADB63859
ID ADB63859 standard; protein; 163 AA.
XX
AC ADB63859;
XX
DT 04-DEC-2003 (first entry)
XX
XX Human protein encoded by clone ASTRO20055570.
DE
XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW cell regeneration; membrane protein; signal transduction-related protein;
KM transcription-related protein; osteoporosis; neurological disease;
XX cancer; tumour.
XX
XX Homo sapiens.
OS
XX EPI308459-A2.
PN
XX 07-MAY-2003.
PD
XX 28-MAR-2002; 2002EP-00007401.
PF
XX

PR 05-NOV-2001; 2001JP-00379298.
PR 25-JAN-2002; 2002US-00350978.
XX
XX (HELI-) HELIX RES INST.
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
XX
XX WPI; 2003-450961/43.
DR
XX N-PSDB; ADB61889.
DR
XX
PT New polynucleotides and polypeptides, useful for developing a diagnostic
PT marker or medicines for regulation of their expression and activity, or
PT as targets of gene therapy.
XX
XX Claim 1; Page; 222pp; English.
XX
XX The invention discloses a polynucleotide comprising a sequence selected
CC from 1970 fully defined nucleotide sequences which encode novel
CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
CC or its partial peptide, an antibody binding to the polypeptide or peptide
CC of the polynucleotide, immunologically assaying the polypeptide or
CC peptide of the polynucleotide by contacting the polypeptide or peptide
CC with the antibody of the encoded protein, and observing the binding
CC between the two, a transformant carrying the polynucleotide in an
CC expressible manner and an antisense polynucleotide. The oligonucleotide
CC is useful as a primer for synthesizing the polynucleotide, or as a probe
CC for detecting the polynucleotide. The polynucleotides and encoded
CC proteins are useful as pharmaceutical agents and many disease-related
CC genes may be included in them, for developing a diagnostic marker or
CC medicines for regulation of their expression and activity, or as targets
CC of gene therapy. The genes are involved in tissue and/or cell
CC regeneration. Membrane proteins, signal transduction-related proteins,
CC transcription-related proteins, disease-related proteins and genes
CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
CC the activity or expression of the encoded protein to treat diseases. The
CC sequence presented is a protein of the invention. Note: Some of the
CC sequence data for this patent is not represented in the printed
CC specification, but is based on sequence information supplied by the
CC European Patent Office.
XX
SQ Sequence 163 AA;
Query Match 100.0%; Score 193; DB 7; Length 163;
Best Local Similarity 100.0%; Pred. No. 1.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 83 NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 118
RESULT 9
ABG31907
ID ABG31907 standard; protein; 200 AA.
XX
AC ABG31907;
XX
XX 05-NOV-2002 (first entry)
DT
XX Human prion protein related peptide #6.
DE
XX Prion; human; follicular dendritic cells; FDC; infection;
KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
XX Homo sapiens.
OS
XX WO200261418-A1.
PN
XX 08-AUG-2002.
PD
XX

XX 31-JAN-2002; 2002MO-JP000803.
 PF 31-JAN-2001; 2001JP-00024279.
 PR (TOHO) UNIV TOHOKU.
 XX
 PA Kitamoto T, Miyoshi K, Mohri S;
 XX WPI; 2002-619277/66.
 DR
 XX
 PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PS indication, applicable in safety test on e.g. drugs and cosmetics.
 XX Example 2; Page 63-64; 69pp; Japanese.
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 200 AA;
 Query Match Best Local Similarity 100.0%; Score 193; DB 5; Length 200;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 143 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 178
 RESULT 10
 ID AAB07316 standard; protein; 208 AA.
 AC AAB07316;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PA

XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-387880/33.
 DR
 XX
 PT Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker Syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;
 Query Match Best Local Similarity 100.0%; Score 193; DB 3; Length 208;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 150 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 185
 RESULT 11
 ID AAB07318 standard; protein; 208 AA.
 AC AAB07318;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX WPI; 2000-387880/33.
 DR
 XX Novel immunoassay for prion protein, used for the determination of

PT	transmissible spongiform encephalopathies in bovines.
XX	
PS	Disclosure; Page 43-44; 50pp; English.
CC	The present sequence is the human prion protein (PrP) sequence.
CC	Conversion of the normal cellular form of PrP into an aggregated,
CC	insoluble isoform is implicated in the pathogenesis of Transmissible
CC	Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC	and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC	this protein in body fluid or tissue samples may be measured by an assay
CC	of the present invention, in which a PrP epitope is captured by an
CC	antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC	epitopes (AAB07320-B07326) are derived from the protease resistant core
CC	of PrP that is occluded when the PrP is in an aggregated state
XX	
SO	Sequence 208 AA:
	Query Match 100.0%; Score 193; DB 3; Length 208;
	Best Local Similarity 100.0%; Pred. No. 1.5e-16;
	Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0
Oy	1 NNFVHDCVNITIKOHTVTTTTKGFNFTSDYKMER 36 151 NNFVHDCVNITIKOHTVTTTTKGFNFTSDYKMER 186
Dn	
	RESULT 12
AAB07327	
ID	AAB07327 standard; protein; 208 AA.
XX	
AC	AAB07327;
XX	
DT	17-OCT-2000 (first entry)
XX	
DE	Mouse prion protein sequence.
XX	
KW	Mouse; prion protein; transmissible spongiform encephalopathy;
XX	bovine spongiform encephalopathy; TSE diagnosis; PrP.
OS	Mus sp.
XX	
FH	Location/Qualifiers
FT	Key 37..68
FT	/note= "Repeat region consisting of tandem repeats of
FT	repeat unit: PHGGGMGQ (AAB07319)"
FT	Disulfide-bond 156..191
FT	Modified-site 208
FT	/note= "C-terminal phospho-inositol glycolipid membrane
FT	anchor (- GPI) "
XX	
PN	WO200029849-A1.
XX	
PD	25-MAY-2000.
XX	
PF	27-OCT-1999; 99WO-FI000836.
XX	
PR	17-NOV-1998; 98FI-00002480.
XX	
PA	(WALL-) WALLAC OY.
PA	(BBSR-) BBSRC OFFICE.
XX	
PI	Hope J, Barnard GJR, Birckett CR;
XX	
DR	WPI: 2000-399778/34.
PT	New immunoassay for prion protein, used for determination of
PT	transmissible spongiform encephalopathies in mammals, comprises specific
PT	capture antibody.
XX	
PS	Disclosure; Page 41-42; 50pp; English.
XX	
CC	The present sequence is the mouse prion protein (PrP) sequence.

Query Match	100.0%	Score 193;	DB 3;	Length 208;
Best Local Similarity	100.0%	Pred. No. 1.5e-18;		
Matches 36;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0
<p>1 NNFVHDCVNITIKOHTVTTTKGENFETDVKMMER 36</p> <p>150 NNFVHDCVNITIKOHTVTTTKGENFETDVKMMER 185</p>				
<p>RESULT 13</p> <p>AAB07329 standard; protein; 208 AA.</p> <p>AAB07329;</p> <p>17-OCT-2000 (first entry)</p> <p>Human prion protein sequence.</p> <p>Human; prion protein; transmissible spongiform encephalopathy;</p> <p>bovine spongiform encephalopathy; TSE diagnosis; PrP.</p> <p>Homo sapiens.</p> <p>Location/Qualifiers</p> <p>29..69</p> <p>/note= "Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"</p> <p>Disulfide-bond 157..192</p> <p>Modified-site 208</p> <p>/note= "C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"</p> <p>MO200029849-A1.</p> <p>25-MAY-2000.</p> <p>27-OCT-1999; 99WO-F1000896.</p> <p>17-NOV-1998; 98FI-00002480.</p> <p>(WALL-) WALLAC OY.</p> <p>(BBSR-) BBSRC OFFICE.</p> <p>Hope J, Barnard GJR, Birkett CR;</p> <p>WPI; 2000-399778/34.</p> <p>New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.</p> <p>Disclosure; Page 43-44; 50pp; English.</p> <p>The present sequence is the human prion protein (PrP) sequence.</p> <p>Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state</p>				

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (A807320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

RESULT 14

ABG31902
 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;

KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN W0200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002W0-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN W0200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002W0-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimera type prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

Search completed: December 3, 2004, 00:55:37
 Job time : 59.6066 sec

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : PIR 79: **
1: pir1: **
2: pir2: **
3: pir3: **
4: pir4: **

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	226	2 A53892	prion-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 UHHU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 S71053	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53615	major prion protei
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	prion protein - go
25	193	100.0	254	2 A34759	prion protein - ch
26	193	100.0	254	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S37137	prion protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 UHHYH	major prion PrP-Sc
32	188	97.4	256	2 JU0268	major prion protei
33	188	97.4	257	2 A23545	major prion PrP27-
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	major prion protei
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 JU01900	major prion protei
38	182	94.3	252	2 JC6175	prion protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-tRNA
42	53	27.5	267	1 UCH	major prion protei
43	53	27.5	267	2 A37372	prion protein homo
44	53	27.5	273	2 A46280	prion protein - ch
45	53	27.5	346	2 B71496	tryptophan-tRNA 11

ALIGNMENTS

RESULT 1

A53892
Prion-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #ext_change 09-Jul-2004
C/Accession: A53892
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A/Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:2889848
A/Accession: A53892
A/Status: preliminary
A/Molecule type: mRNA
A/Molecule type: mRNA
A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major prion protein

Query Match 100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 4e-16;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
DB 145 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 180

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #ext_change 09-Jul-2004
C/Accession: S71041; S53630
R/Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437
R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7857269
A/Accession: S53630
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 157 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 192

RESULT 3

711048
major prion protein - Callipectus moloch (fragment)
C/Species: Callipectus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 166 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201

RESULT 4

711056
major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 166 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201

DB 166 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201

RESULT 5

S53627
major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53627; S71043
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 165 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 200

RESULT 6

S71045
major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G47434
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 165 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 200

RESULT 7

S53634


```

major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53634
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 36
|||||
Db 172 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 207

RESULT 8
553631
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53631
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 36
|||||
Db 172 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 207

RESULT 9
UHUH
major prion protein precursor - human
N:Alternate names: 11k amyloid protein; 27-30K 61aloglycoprotein; PrP 27-30; PrP 33-35C;
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A24177; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633; I79

```

A:Kretzschmar, H.A.; Storrirg, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A:Title: Molecular cloning of a human prion protein cDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <KRE>
A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
A:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A:Title: Genomic structure of the human prion protein gene.
A:Reference number: A40372; MUID:91328137; PMID:1678248
A:Accession: A40372
A:Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80,89-253 <PUC>
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be
R. Lideo, Y.C.J.; Lideo, R.V.; Clawson, G.A.; Smucker, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017
A:Molecule type: mRNA
A:Residues: 8-117,119-253 <LTA>
A:Cross-references: GB:DD0015; NID:g220015; PIDN:BA00011.1; PID:g220016; GB:M13667; NID
R.Taflaviani, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72, 'X',74-76, 'XX',79, 'XXX',83-86,111-128, 'V',130-150 <TAG>
R.Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A:Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AA859442.1; PID:g190518
A:Accession: I68597
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AA859443.1; PID:g190520
R.Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.; I
Neurology 42, 422-427, 1992
A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutator
A:Reference number: I58135; MUID:92140671; PMID:1736177
A:Accession: I58135
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91, 'PHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGG' <RES>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AA821134.1; PID:g244699
R.Goldfarb, L.G.; Brown, P.; McComb, W.R.; Goldfarb, D.; Sweigard, G.D.; Wille, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 89, 10926-10930, 1991
A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, ar
A:Reference number: I59184; MUID:92073400; PMID:1683708
A:Accession: I59184
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AA820521.1; PID:g239878; GB:S71210; NID
C:Genetic8
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:Note: #status absent
A:Note: one intron occurs before the initiator codon
A:Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler-
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F1-22/Domain: signal sequence #status predicted <SIG>
 F1-23/330/Product: major prion protein #status predicted <MAT>
 F1-24/92/Region: 8-residue repeats (P-H-G-G-G-M-G-O)
 F1-25/25/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F1-26/21/Disulfide bonds: #status predicted
 F1-27/19/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F1-28/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 36
 173 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 208

RESULT 10

S53624

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS009.1; PID:9475584

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 36
 173 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 208

RESULT 11

S53623

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 36
 173 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 208

RESULT 12

S53620

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 36
 173 NNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMER 208

RESULT 13

S53625

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210, 'F', 212-253 <SCW>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 ||||||||||||||||||||||||||||||||||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I84423; S53622; S71054

R:Schaezel, H.M.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; MUID:95083661; PMID:7991600

A:Accession: I84423

A:Status: preliminary; translated from GB/EMBL/DBD

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:9595850; PIDN:AA68635.1; PID:95958

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71041

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
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 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210 'R', 212-247 <SCW>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
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 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:39

Job time: 11.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFWHDCVNTTKQHTVTTTGGENTFETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	232	PRIO_ATGE	P40246 atelae geof
2	193	100.0	238	PRIO_CERAT	Q95145 cercoecebus
3	193	100.0	238	PRIO_THGE	Q95270 theopithec
4	193	100.0	238	086XR1	086xt1 homo sapien
5	193	100.0	240	08VHV4	08vhw4 microtus ag
6	193	100.0	241	PRIO_CALMO	P40248 callicebus
7	193	100.0	241	PRIO_MANSP	P40255 mandillius
8	193	100.0	245	PRIO_CERAE	P40250 cercopthec
9	193	100.0	246	PRIO_CERMO	P61761 cercopthec
10	193	100.0	246	PRIO_CERNE	P61762 cercopthec
11	193	100.0	246	PRIO_CERPO	Q95176 cercocebus
12	193	100.0	246	PRIO_ERIPA	Q95174 erythrocebu
13	193	100.0	246	AA083636	AA083636 homo sapi
14	193	100.0	248	08VHV5	Q8vhw5 cletionom
15	193	100.0	252	PRIO_CALJA	P40247 callithrix
16	193	100.0	252	PRIO_CEBAP	P40249 cebus ape11
17	193	100.0	253	PRIO_COGU	P40251 colobus que
18	193	100.0	253	PRIO_GORGO	P40252 gorilla gor
19	193	100.0	253	PRIO_HUMAN	P64156 homo sapien
20	193	100.0	253	PRIO_HYLLA	P61766 hylobates 1
21	193	100.0	253	PRIO_HYLSY	P61767 hylobates s
22	193	100.0	253	PRIO_MACFA	P40254 macaca fasc
23	193	100.0	253	PRIO_PANTR	P61768 pan troglod
24	193	100.0	253	PRIO_PONPY	P40256 pongo pygma
25	193	100.0	253	PRIO_PPREP	P40257 presbytis t
26	193	100.0	253	06FG8	Q6fg8 homo sapien
27	193	100.0	253	06JL99	Q6jl99 macaca mula
28	193	100.0	253	09Z075	Q9z075 meriones un
29	193	100.0	253	AA580162	AA580162 homo sapi
30	193	100.0	253	AA12192	AA12192 macaca mu
31	193	100.0	254	PRIO_CRIGR	Q60506 cricetus

ALIGNMENTS

32	193	100.0	254	1	PRIO_CRIMI	Q60468 cricetus
33	193	100.0	254	1	PRIO_MOUSE	P04925 mus musculu
34	193	100.0	254	1	PRIO_RAT	P13852 rattus norv
35	193	100.0	254	1	PRIO_SIGHI	Q92073 sigmodon hi
36	193	100.0	254	2	Q92074	Q92074 sigmodon fu
37	193	100.0	254	2	08VHV6	Q8vhw6 apodemus by
38	193	100.0	254	2	AAD19993	Aad19993 rattus no
39	193	100.0	277	2	06SE81	O6se81 homo sapien
40	193	100.0	277	2	AA21603	Aa21603 homo sapi
41	193	100.0	285	2	075942	O75942 homo sapien
42	193	100.0	285	2	0866W7	O866w7 ochotona pr
43	192	99.5	260	2	0866V6	O866v6 diceros bic
44	192	99.5	260	1	PRIO_SAI5C	P40258 saimiri sci
45	191	99.0	215	2	Q811W3	Q811w3 spalax leuc

RESULT 1

ID	PRIO_ATGE	STANDARD	PRT	232 AA
AC	P40246;			
DT	01-FEB-1995 (Rel. 31, Created)			
DT	01-FEB-1995 (Rel. 31, Last sequence update)			
DT	05-JUL-2004 (Rel. 44, Last annotation update)			
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).			
GN	Name=PRNP;			
OS	Ateles Geoffroyi (Black-handed spider monkey).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.			
OX	NCBI_TaxID=9509;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE=5139066; PubMed=7837269;			
RA	Schaezel H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;			
RT	"Prion protein gene variation among primates."			
RL	J. Mol. Biol. 245:362-374(1995).			
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.			
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "kinds".			
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.			
CC	-1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.			
CC	-1- SIMILARITY: Belongs to the prion family.			
CC	-----			
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CC	-----			
DR	EMBL; U08309; AAC50097.1; -			
DR	PIR; S71041; S71041.			
DR	HSSP; P23907; 1G04.			
DR	InterPro; IPR00817; Prion.			
DR	Pfam; PF00377; Prion; 1.			
DR	Pfam; PF03991; Prion octapep; 5.			
DR	PRINTS; PR00341; PRION.			
DR	PRINTS; PS00291; PRION_1; 1.			
DR	PROSITE; PS00706; PRION_2; 1.			
DR	Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.			
FT	NON_TER	1		
FT	SIGNAL	<1	15	By similarity.
FT	CHAIN	16	214	Major prion protein.
FT	PROPEP	215	>232	Removed in mature form (By similarity).
FT	LIPID	214	214	GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity)
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 N-linked (GlcNAc... ) (Potential).
FT REPEAT 44 51 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 52 59 0.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT NON TER 232 232 3.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5.2e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKKMER 36
Db 157 NNFVHDCVNTIKQHTVTTTGGNFETDVKKMER 192

RESULT 2
PRIO_CERAT
ID PRIO_CERAT STANDARD; PRT; 238 AA.
AC G95145; G95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OC Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04
CC InterPro; IPR000817; Prion.
CC Pfam; PF003921; Prion_1
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW

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FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 GPI-anchor amidated serine (By
FT DISULFID 164 199 similarity).
FT CARBOHYD 166 166 By similarity.
FT CARBOHYD 182 182 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3B6C3E3531B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKKMER 36
Db 158 NNFVHDCVNTIKQHTVTTTGGNFETDVKKMER 193

RESULT 3
PRIO_THEGE
ID PRIO_THEGE STANDARD; PRT; 238 AA.
AC G95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP; Synonym=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion_1
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00341; PRION_2; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL
FT CHAIN
FT PROPEP
FT DISULFID
FT LIPID
FT CARBOHYD
FT CARBOHYD
FT DOMAIN
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT NON_TER
SQ SEQUENCE

Query Match
Best Local Similarity 100.0%; Score 193; DB 1; Length 238;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 193

RESULT 4
O86XRL PRELIMINARY; PRT; 238 AA.
AC O86XRL;
DT 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLREL. 26, Last annotation update)
DE Prion protein (Fragment).
OS Name=PRNP;
OS Homo sapiens (human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 238;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 193

RESULT 5
O8VHVA PRELIMINARY; PRT; 240 AA.
AC O8VHVA;

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DT 01-MAR-2002 (TRENBLREL. 20, Created)
DT 01-MAR-2002 (TRENBLREL. 20, Last sequence update)
DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)
DE Prion protein (Fragment).
OS Name=PrP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sclerognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipi H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 240;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
DB 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 200

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callipebus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Callitrichus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL: U08312; AACG0100.1; -
DR PIR: S71048; S71048.
DR HSSP: P23907; 1G04.
DR InterPro: IPR00817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Glycoprotein: GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.

FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT DISULFID 172 207 By similarity.
FT LIPID 223 223 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 201

RESULT 7
PRIO_MANSP STANDARD; PRT; 241 AA.
ID PRIO_MANSP
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandillus sphinx (Mandril) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Mandrillus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL: U08303; AACG0091.1; -
DR PIR: S71056; S71056.
DR HSSP: P23907; 1G04.
DR InterPro: IPR00817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Glycoprotein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 201

RESULT 8
PRIO_CERAE STANDARD; PRT; 245 AA.
ID PRIO_CERAE
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called


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CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL: U08291; AAC50080.1; -.
CC      EMBL: U08292; AAC50081.1; -.
CC      PIR: S53627; S53627.
CC      PIR: S71045; S71045.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      Pfam: PF03991; Prion octapep; 5.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      SIGNAL 1 22
CC      CHAIN 23 222
CC      PROPEP 223 245
CC      LIPID 222 222
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CC      DISULFID 171 206
CC      CARBOHYD 173 173
CC      CARBOHYD 189 189
CC      DOMAIN 51 83
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CC      FT REPEAT 60 67
CC      FT REPEAT 68 75
CC      FT REPEAT 76 83
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CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
CC      QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
CC      DB 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200
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CC      RESULT 9
CC      PRIO_CERNO STANDARD; PRT; 246 AA.
CC      AC P61761; O95172; O95173;
CC      DT 01-NOV-1997 (Rel. 35, Created)
CC      DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC      DT 05-JUN-2004 (Rel. 44, Last annotation update)
CC      DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
CC      GN Name=PRNP;
CC      OS Cercopithecus mona (Mona monkey).
CC      CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC      CC Cercopithecinae; Cercopithecus.
CC      NCBI_TaxID=36226;
CC      OX NCB1
CC      RN [1]
CC      RP SEQUENCE FROM N.A.
CC      RA van der Kuyt A.C., Dekker J.T., Goudemits J.;
CC      RT "Evidence for an increased substitution rate of the hominoid prion
CC      protein gene during the period of brain expansion.";

```

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      or send an email to license@isb-sib.ch).
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CC      EMBL: U75386; AAB50625.1; -.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      Pfam: PF03991; Prion octapep; 6.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
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CC      PROPEP 224 246
CC      LIPID 223 223
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CC      FT REPEAT 53 60
CC      FT REPEAT 61 68
CC      FT REPEAT 69 76
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CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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CC      QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
CC      DB 166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201
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CC      RESULT 10
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CC      AC P61762; O95172; O95173;
CC      DT 01-NOV-1997 (Rel. 35, Created)
CC      DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC      DT 05-JUN-2004 (Rel. 44, Last annotation update)
CC      DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
CC      GN Name=PRNP;
CC      OS Cercopithecus neglectus (De Brazza's monkey).
CC      CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC      CC Cercopithecinae; Cercopithecus.
CC      NCBI_TaxID=36227;
CC      OX NCB1
CC      RN [1]
CC      RP SEQUENCE FROM N.A.

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RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75387; AAB50626.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION 1; 1.
 CC PROSITE: PS00706; PRION 2; 1.
 CC KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
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 CC 1 NNFVHDCVNIITIKOHTVTTTGGKGFETDVKMER 36
 CC Db 166 NNFVHDCVNIITIKOHTVTTTGGKGFETDVKMER 201
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 CC RESULT 11
 CC PRIO CERTO STANDARD; PRT; 246 AA.
 CC AC 095176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 CC OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecinae; Cercopithecus.

OK NCBI_TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75385; AAB50628.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION 1; 1.
 CC PROSITE: PS00706; PRION 2; 1.
 CC KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
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 CC 1 NNFVHDCVNIITIKOHTVTTTGGKGFETDVKMER 36
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 CC RESULT 12
 CC PRIO ERYPA STANDARD; PRT; 246 AA.
 CC AC 095174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopitheciidae;
 OC Cercopitheciinae; Erythrocebus.
 NC NCB1_Taxid=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Gouda J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC
 DR EMBL; U75388; AAB50627.1; -.
 DR HSSP; P23907; 1G04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
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 FT REPEAT 77 84
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 Query Match 100.0%; Score 193; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201
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 AC AAO83636;
 DT 02-MAR-2004 (TRENBLrel. 27, Created)
 DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
 DT 02-MAR-2004 (TRENBLrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCB1_Taxid=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -.
 KM Prion.
 FT NON_TER 1
 FT NON_TER 246
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 Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201
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 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (TRENBLrel. 20, Created)
 DT 01-MAR-2002 (TRENBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 NC NCB1_Taxid=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367624; AAL57231.1; -.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
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 Best Local Similarity 100.0%; Pred. NO. 5.6e-18;
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 Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208
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 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTTTTGGENTETDVKKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
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2: /cgn2_6/ptodata/1/1aa/5B_COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6A_COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/6B_COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PCTUS_COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10 Sequence 10, Appl
2	193	100.0	245	4	US-09-431-887-5 Sequence 5, Appl
3	193	100.0	245	4	US-09-431-887-15 Sequence 15, Appl
4	193	100.0	252	4	US-09-431-887-13 Sequence 13, Appl
5	193	100.0	252	4	US-09-431-887-17 Sequence 17, Appl
6	193	100.0	253	1	US-08-242-188-2 Sequence 2, Appl
7	193	100.0	253	1	US-08-509-261A-2 Sequence 2, Appl
8	193	100.0	253	1	US-08-660-626-8 Sequence 8, Appl
9	193	100.0	253	1	US-08-692-892-2 Sequence 2, Appl
10	193	100.0	253	2	US-08-713-939A-2 Sequence 2, Appl
11	193	100.0	253	2	US-08-868-162A-22 Sequence 2, Appl
12	193	100.0	253	3	US-09-031-168-8 Sequence 8, Appl
13	193	100.0	253	3	US-09-128-450-20 Sequence 20, Appl
14	193	100.0	253	3	US-09-036-579-2 Sequence 2, Appl
15	193	100.0	253	3	US-09-823-454-20 Sequence 20, Appl
16	193	100.0	253	3	US-09-550-374-2 Sequence 2, Appl
17	193	100.0	253	4	US-09-431-887-1 Sequence 1, Appl
18	193	100.0	253	4	US-09-431-887-2 Sequence 2, Appl
19	193	100.0	253	4	US-09-431-887-3 Sequence 3, Appl
20	193	100.0	253	4	US-09-431-887-4 Sequence 4, Appl
21	193	100.0	253	4	US-09-431-887-7 Sequence 7, Appl
22	193	100.0	253	4	US-09-431-887-8 Sequence 8, Appl
23	193	100.0	253	4	US-09-431-887-9 Sequence 9, Appl
24	193	100.0	253	4	US-09-431-887-10 Sequence 10, Appl
25	193	100.0	253	4	US-09-431-887-11 Sequence 11, Appl
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27	193	100.0	253	4	US-09-431-887-14 Sequence 14, Appl

28	193	100.0	253	4	US-09-431-887-16 Sequence 16, Appl
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31	193	100.0	253	4	US-09-943-906-2 Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8 Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57 Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72 Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3 Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1 Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1 Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7 Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1 Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1 Sequence 21, Appl
41	193	100.0	254	2	US-08-868-162A-21 Sequence 7, Appl
42	193	100.0	254	3	US-09-031-168-7 Sequence 19, Appl
43	193	100.0	254	3	US-09-128-450-19 Sequence 28, Appl
44	193	100.0	254	3	US-09-128-450-28 Sequence 1, Appl
45	193	100.0	254	3	US-09-036-579-1 Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 NNFVHDCVNITIKQHTTTTGGENTETDVKKMER 36
Db 84 NNFVHDCVNITIKQHTTTTGGENTETDVKKMER 119

RESULT 2
 US-09-431-887-5
 / Sequence 5, Application US/09431887
 / Patent No. 6534036
 / GENERAL INFORMATION:
 / APPLICANT: D-Gen Limited
 / TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 / FILE REFERENCE: ICOT/P21952
 / CURRENT APPLICATION NUMBER: US/09/431,887
 / PRIOR FILING DATE: 1999-11-02
 / PRIOR APPLICATION NUMBER: GB 9824091.4
 / NUMBER OF SEQ ID NOS: 37
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 5
 / LENGTH: 245
 / TYPE: PRT
 / ORGANISM: Cercopithecus aethiops
 US-09-431-887-5

Query Match 100.0%; Score 193; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 1.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
 Db 165 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 200

RESULT 3
 US-09-431-887-15
 / Sequence 15, Application US/09431887
 / Patent No. 6534036
 / GENERAL INFORMATION:
 / APPLICANT: D-Gen Limited
 / TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 / FILE REFERENCE: ICOT/P21952
 / CURRENT APPLICATION NUMBER: US/09/431,887
 / PRIOR FILING DATE: 1999-11-02
 / PRIOR APPLICATION NUMBER: GB 9824091.4
 / NUMBER OF SEQ ID NOS: 37
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 15
 / LENGTH: 245
 / TYPE: PRT
 / ORGANISM: Cercopithecus diana
 US-09-431-887-15

Query Match 100.0%; Score 193; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 1.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
 Db 165 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 200

RESULT 4
 US-09-431-887-13
 / Sequence 13, Application US/09431887
 / Patent No. 6534036
 / GENERAL INFORMATION:
 / APPLICANT: D-Gen Limited
 / TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 / FILE REFERENCE: ICOT/P21952
 / CURRENT APPLICATION NUMBER: US/09/431,887
 / PRIOR FILING DATE: 1999-11-02
 / PRIOR APPLICATION NUMBER: GB 9824091.4

/ PRIOR FILING DATE: 1999-11-04
 / NUMBER OF SEQ ID NOS: 37
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 13
 / LENGTH: 252
 / TYPE: PRT
 / ORGANISM: Callithrix sp.
 US-09-431-887-13

Query Match 100.0%; Score 193; DB 4; Length 252;
 Best Local Similarity 100.0%; Pred. No. 1.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
 Db 172 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 207

RESULT 5
 US-09-431-887-17
 / Sequence 17, Application US/09431887
 / Patent No. 6534036
 / GENERAL INFORMATION:
 / APPLICANT: D-Gen Limited
 / TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 / FILE REFERENCE: ICOT/P21952
 / CURRENT APPLICATION NUMBER: US/09/431,887
 / PRIOR FILING DATE: 1999-11-02
 / PRIOR APPLICATION NUMBER: GB 9824091.4
 / NUMBER OF SEQ ID NOS: 37
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 17
 / LENGTH: 252
 / TYPE: PRT
 / ORGANISM: Cebus sp.
 US-09-431-887-17

Query Match 100.0%; Score 193; DB 4; Length 252;
 Best Local Similarity 100.0%; Pred. No. 1.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
 Db 172 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 207

RESULT 6
 US-08-242-188-2
 / Sequence 2, Application US/08242188
 / Patent No. 5565186
 / GENERAL INFORMATION:
 / APPLICANT: Prusiner, Stanley B.
 / APPLICANT: Scott, Michael R.
 / TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 / TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
 / NUMBER OF SEQUENCES: 4
 / CORRESPONDENCE ADDRESS:
 / ADDRESS: Karl Bosicovic
 / STREET: 2200 Sand Hill Road
 / CITY: Menlo Park
 / STATE: CA
 / COUNTRY: USA
 / ZIP: 94025
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: Floppy disk
 / COMPUTER: IBM PC compatible
 / OPERATING SYSTEM: PC-DOS/MS-DOS
 / SOFTWARE: PatentIn Release #1.0, Version #1.25
 / CURRENT APPLICATION DATA:
 / APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: in a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicvic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-692-892-2

Query Match 100.0%; Score 193, DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMER 36
173 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMER 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5845533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIPOBIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flinn & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193, DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMER 36
173 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMER 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asclil
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149

GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suetle
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRP
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match
Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMER 36
DB 173 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMER 208

RESULT 15

US-09-823-494-20
Sequence 20; Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match
Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMER 36
DB 173 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMER 208

Search completed: December 3, 2004, 00:18:56
Job time: 14.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTTTSGENFTEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356523098 residues
Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA.*
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2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	14	US-10-050-902-348
2	193	100.0	117	14	US-10-050-902-348
3	193	100.0	117	14	US-10-050-902-348
4	193	100.0	117	14	US-10-050-902-348
5	193	100.0	124	14	US-10-050-902-324
6	193	100.0	124	14	US-10-050-902-324
7	193	100.0	124	14	US-10-050-902-324
8	193	100.0	124	14	US-10-050-902-324
9	193	100.0	124	14	US-10-050-902-324
10	193	100.0	124	14	US-10-050-902-324
11	193	100.0	124	14	US-10-050-902-324
12	193	100.0	124	14	US-10-050-902-324
13	193	100.0	124	14	US-10-050-902-324

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	14	US-10-301-468A-25	Sequence 25, Appl1
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	193	100.0	226	14	US-10-205-194-121	Sequence 121, Appl
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175230A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Steufendiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRP
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRP
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRP
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrPc construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 53 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 88

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosnek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mRFP
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 53 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellucio, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mRFP
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 53 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lutz, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 84 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: Primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 82 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 193; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 6,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Pp2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 193; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCF
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 193; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 8,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

DB 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 178

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCF
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 193; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Scholz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 01115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 193; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 186

RESULT 14

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US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
        |||||||
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186
        |||||||

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-7

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
        |||||||
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186
        |||||||

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Job time : 42.6098 secs
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218
Sequence: 1 NNFVHDCVNITIKQHTVTTTNGENFTEDVQMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: geneseqp1990s: *
3: geneseqp2000s: *
4: geneseqp2001s: *
5: geneseqp2002s: *
6: geneseqp2003as: *
7: geneseqp2003bs: *
8: geneseqp2004s: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	211	100.0	117	5	ABG94357 Modified
2	211	100.0	117	5	ABG80669 Human pri
3	211	100.0	117	5	ABD24196 Modified
4	211	100.0	124	5	ABG94340 Mouse mpr
5	211	100.0	124	5	ABG80652 Mouse tru
6	211	100.0	124	7	ADD24200 mPr-Pt-EK-
7	211	100.0	142	2	AAW17686
8	211	100.0	163	7	ADB63859 Human pri
9	211	100.0	200	5	ABG31907 Human pri
10	211	100.0	208	3	AAW07316 Mouse pri
11	211	100.0	208	3	AAW07318 Human pri
12	211	100.0	208	3	AAW07327 Mouse pri
13	211	100.0	208	3	AAW07329 Human pri
14	211	100.0	208	5	ABG31902 Human pri
15	211	100.0	208	5	ABG31904 Chimera-t
16	211	100.0	208	7	ADJ66133 Mouse pri
17	211	100.0	209	5	ABG31905 HCHV type
18	211	100.0	211	4	ABG30801 Amino aci
19	211	100.0	225	6	ABR42793 Rat prion
20	211	100.0	226	7	ABD85240 Monkey pr
21	211	100.0	245	4	AAW72342 Cercopit
22	211	100.0	245	4	AAW72352 Cercopit
23	211	100.0	253	2	AAW86715 Human pri
24	211	100.0	253	2	AAW86660 Human pri
25	211	100.0	253	2	AAW85901 Human pri

26	211	100.0	253	2	AAW07994 Human pri
27	211	100.0	253	3	AAW81485 Human pri
28	211	100.0	253	3	AAW06272 Human pri
29	211	100.0	253	3	AAW15035 Human pri
30	211	100.0	253	4	AAW72339 Chimpanze
31	211	100.0	253	4	AAW72347 Prion pro
32	211	100.0	253	4	AAW72353 Guezeza mo
33	211	100.0	253	4	AAW72344 Rhesus mo
34	211	100.0	253	4	AAW72345 Gibbon pr
35	211	100.0	253	4	AAW72350 Marmoset
36	211	100.0	253	4	AAW72351 Hamadryas
37	211	100.0	253	4	AAW72348 Prion pro
38	211	100.0	253	4	AAW72356 Siamese p
39	211	100.0	253	4	AAW72346 Prion pro
40	211	100.0	253	4	AAW72355 Prion pro
41	211	100.0	253	4	AAW72349 Prion pro
42	211	100.0	253	4	AAW72340 Orangutan
43	211	100.0	253	4	AAW72338 Human pri
44	211	100.0	253	4	AAW72354 Capuchin
45	211	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KM vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-026598P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Seibel P;
PI Ploesek C;
XX
PS WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organiser comprising
XX at least one first attachment site, where the organiser is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Abeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cyostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC
 SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Dy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 40
 Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 91

RESULT 2

ABG80669 standard; protein; 117 AA.

XX ABG80669;

DT 29-NOV-2002 (first entry)

DE Human prion protein/cysteine-containing peptide fusion protein.

KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM gratic varicella host disease; amyloid beta; Abeta 1-42; influenza; mutant;
 KM adult respiratory distress syndrome; AIDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
 KM enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

XX MO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002MO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

PR 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVA) NOVARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER P.

PA (ORTW) ORTMANN R.

PA (LUBO) LUBOWITZ R.

PA (STAU) STAUFENBIEL M.

PA (FREY) FREY P.

XX Maurer P., Lechner F., Ortman R., Luegend R., Staufenbiel M., Frey P;

PI Renner WA, Bachmann M, Tiesot A, Seibel P, Ploesek C;
 XX WPI; 2002-636514/68.

DR Molecular antigen array used in the production of vaccines for infectious

PT diseases.

XX Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an antigen or antigenic determinant attached to the
 CC site, where the antigen is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; and (c) a scaffold interact
 CC occurring with the antigen or antigenic determinant, and where the second
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Dy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 40
 Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 91

RESULT 3

ADD24196 standard; protein; 117 AA.

XX ADD24196;

DT 15-JAN-2004 (first entry)

DE Modified human prion protein amino acid sequence.

KM vaccine composition; virus-like particle; core particle;

KM first attachment site; antigen; antigenic determinant; prion protein;

KM PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mutant; muten.

OS Synthetic.

XX prion.

XX MO2003059386-A2.

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 XX
 PR 21-JAN-2002; 2002WO-IB000166.
 XX
 PR 08-JUL-2002; 2002US-0393725P.
 XX
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS
 PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 CC
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 52 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002;
 XX
 PF 21-JAN-2002; 2002WO-IB000166.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 XX
 PR 04-MAY-2001; 2001US-0288549P.
 XX
 PR 05-OCT-2001; 2001US-0326989P.
 XX
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 XX
 PI Plossek C;
 XX
 DR WPI; 2002-627351/57.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the association to form an ordered and
 CC scaffold interfere through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β -casein coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mucin;
 KM graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX 25-JUL-2002.
 PD
 XX 21-JAN-2002; 2002WO-IB000168.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUEO) LUEOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ottmann R, Lueoend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tisot A, Seibel P, Ploesek C;
 DR WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 XX Example 7; Page 415; 418pp; English.
 PS The invention relates to a composition comprising: (a) a non-natural
 PS molecular scaffold comprising: (1) a core particle selected from: (1) a
 PS core particle of a non-natural origin; and (2) a core particle of natural
 PS origin; and (11) an antigenic determinant comprising at least one first attachment
 PS site, where the antigenic determinant is connected to the core particle by at least
 PS one covalent bond; (b) an antigen or antigenic determinant with at least
 PS one second attachment site, where the antigen or antigenic determinant is
 PS attached to the antigenic determinant by at least one attachment site not naturally
 PS occurring with the antigen or antigenic determinant; and (11) an
 PS attachment site naturally occurring with the antigen or antigenic
 PS determinant, where the second attachment site is capable of association
 PS through at least one non-peptide bond to the first attachment site; and
 PS where the antigen or antigenic determinant and the scaffold interact
 PS through the association to form an ordered and repetitive antigen array.
 PS Also included is a process for producing a non-naturally occurring
 PS ordered and repetitive antigen array. The composition is used in
 PS immunisation and as a vaccine for diseases such as influenza, graft
 PS versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 PS respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 PS acute lymphoblastic leukaemia (ALL), non-Hodgkin's lymphoma, Grave's disease,
 PS systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 PS gravis, immunoproliferative disease lymphadenopathy,
 PS angioimmunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 PS rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 PS osteoporosis and infectious diseases. The present sequence is a modified
 PS antigen for use in the array of the invention. The antigen is modified to
 PS possess a cleavage site (entropinase or factor Xa) and a Cysteine-
 PS containing N- or C-terminal linker peptide which serves as the attachment
 PS point to a virus like particle or bacterial protein (the scaffold
 XX protein).
 SO Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQ 40
 Db 53 NNFFHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE MP-Pr-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; MP-Pr-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Fellcioli E, Renner WA;
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Example 13; SEQ ID NO 93; 246pp; English.
 PS This invention relates to a novel vaccine composition comprising a virus-
 PS like or a core particle with at least one first attachment site and at
 PS least one antigen or antigenic determinant that is a prion protein (PrP)
 PS or its dimer, or a PrP peptide, the antigen or antigenic determinant
 PS being bound to the virus-like or core particle. The vaccine of the
 PS invention may have neuroprotective or anti-inflammatory activity. The
 PS composition is useful as a medicament or in manufacturing a medicament
 PS for the treatment or prevention of prion diseases. The prion diseases may
 PS include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 PS disease. The present sequence is the amino acid sequence of the cleaved
 PS protein translated from a mouse prion protein (PrP) vector (MP-Pr-EK-Fc*)
 PS which was used during the exemplification of the invention.
 SO Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQ 40
 Db 53 NNFFHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQ 92
 RESULT 7
 AA17686
 ID AA17686 standard; peptide; 142 AA.
 XX
 AC AA17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 XX Homo sapiens.
 XX
 XX MO9716728-A1.
 XX
 XX 09-MAY-1997.
 XX
 XX 28-OCT-1996; 96MO-US017462.
 XX
 XX 02-NOV-1995; 95US-00556823.
 XX
 XX (REGC) UNIV CALIFORNIA.
 XX
 XX Prusiner SB, Kaneko K, Cohen FE;
 XX
 XX MPI, 1997-272248/24.
 XX
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 XX Claim 11; Page 7-38; 50pp; English.
 XX
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 40
 DB 84 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 123

RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 XX ADB63859;
 XX
 XX 04-DEC-2003 (first entry)
 XX
 XX Human protein encoded by clone ASTR020055570.
 XX
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 XX Homo sapiens.
 XX
 XX EPI308459-A2.
 XX
 XX 07-MAY-2003.
 XX
 XX 28-MAR-2002; 2002EP-00007401.
 XX
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 XX (HELI-) HELIX RES INST.
 XX
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 XX MPI, 2003-450961/43.
 XX
 XX N-PSDB; ADB61889.
 XX
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 XX Claim 1; Page; 222pp; English.
 XX
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX
 XX Sequence 163 AA;
 SQ
 Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 40
 DB 83 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 122

RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 XX ABG31907;
 XX
 XX 05-NOV-2002 (first entry)
 XX
 XX Human prion protein related peptide #6.
 XX
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 XX Homo sapiens.
 XX
 XX WO200261418-A1.
 XX
 XX 08-AUG-2002.
 XX
 XX

XX	31-JAN-2002; 2002WO-JP000803.
PF	
XX	
PR	31-JAN-2001; 2001JP-00024279.
XX	
PA	(TOHO) UNIV TOHOKU.
XX	
PI	Kitamoto T, Miyoshi K, Mohri S;
XX	
DR	WPI, 2002-619277/66.
XX	
PT	Screening (non-)human prion disease infection factor based on abnormal
PT	prion protein sedimentation in non-human follicular dendritic cells as
XX	indication, applicable in safety test on e.g. drugs and cosmetics.
PS	
XX	Example 2; Page 63-64; 69pp; Japanese.
XX	
CC	This invention relates to a novel method for screening human or non-
CC	human prion disease infection factor in a sample by using abnormal prion
CC	protein sedimentation in non-human follicular dendritic cells (FDC) as
CC	indication. The method of the invention is useful for screening (non-)
CC	human prion disease infection factor, which is applicable in safety tests
CC	on drugs like blood preparations, foods and cosmetics, and for developing
CC	drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC	disease (CJD). The method of the invention is simple and quick. The
CC	present sequence represents a human prion related protein of the
XX	invention
XX	
50	Sequence 200 AA;

Query Match	100.0%;	Score 211;	DB 5;	Length 200;
Best Local Similarity	100.0%;	Pred. No. 2.5e-20;		
Matches	40;	Conservative	0;	Mismatches 0;
			Indels	0;
			Gaps	0

Dy
1 NNNVHDCVNITIKQHTVTITTKGSEFTEDVKMERVEQ 40

Dd
143 NNFVHDCVNITIKQHTVTITTKGSEFTEDVKMERVEQ 182

RESULT 10	
AAB07316	
ID	AAB07316 standard; protein; 208 AA.
XX	

17-OCT-2000 (first entry)
 Mouse prion protein sequence.

bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

Accession	Protein	Location/Qualifiers
U00096	Key Region	37..68
U00096	Disulfide-bond	/note= "Repeat region consisting of tandem repeats of 156..191
U00096	Modified-site	208
U00096		/note= "C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

NN MO200029850-A1.
 XX
 XX 25-MAY-2000.
 DD
 XX 27-OCT-1999; 99WO-FI000897.
 FF
 XX 17-NOV-1998; 98FI-00002481.
 XX
 XX
 XX
 XX (WALL-) WALLAC OF.
 XX (BBR-) BBRC OFFICE.
 AA

XX Hope J, Barnard GJR, Birkett CR;
 XX WPI; 2000-387880/33.
 DR
 XX
 XX Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 PT
 PS Disclosure; Page 41-42; 50pp; English.
 XX

CC Conversion of the normal cellular form of PrP into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease
CC and Gerstmann-Sträussler-Scheinker syndrome (GSS). The concentration
CC of this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a PrP epitope is captured by an
CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC (AAB07320-B07336) are derived from the protease resistant core
CC of PrP that is occluded when the PrP is in an aggregated state
xx
xx Sequence 208 AA;

Query Match	100.0%	Score 211	DB 3	Length 208
Best Local Similarity	100.0%	Pred. No. 2.6e-20		
Matches	40	Conservative	0	Mismatches 0

1 NNFVHDCVNTTIKQHTVTTTCKENFETDYMMERVEQ 40
150 NNFVHDCVNTTIKQHTVTTTCKENFETDYMMERVEQ 189

RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA
XX

Human prion protein sequence	17-OCT-2000 (first entry)
DI	
XX	
DE	
XX	

bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
Homo sapiens.

Key	Location/Qualifiers
Region	29..69
Disulfide-bond	/note="repeat region consisting of tandem repeats of repeat unit: PHGGGMCQ (AAB07319)"
Modified-site	157..192
	208
	/note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

MO2000239850-A1.
25-MAY-2000.
27-OCT-1999; 59MO-F1000897
17-NOV-1998; 98FI-00002481.
(WALL-) WALLAC OY.
(BSR-) BBSRC OFFICE.
Hope J, Barnard GR, Birkenhead
WPI; 2000-387880/33.
Novel immunoassay for prion protein

NOVEL IMMUNOASSAY FOR PRION PROTEIN, USED FOR THE DETERMINATION OF

PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKMERVREQ 40
 DB 151 NNFVHDCVNITIKQHTVTTTGGENTETDVKMERVREQ 190
 RESULT 12
 AAB07327
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KM Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PS New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKMERVREQ 40
 DB 150 NNFVHDCVNITIKQHTVTTTGGENTETDVKMERVREQ 189
 RESULT 13
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KM Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PS New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14

ABG31902 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;

KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 15
 ABG31904 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimeric-type prion protein #2.

XX Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KW food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFWHDCNITIKOHTVTTTGGNFETDVKMERVVEQ 190

Search completed: December 3, 2004, 00:55:37
 Job time : 66.2295 sec

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Sequence: 1 NNFVHDCVNITTKQHTVTTTKGKNTFEDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	226	2 A53892	prion-related prot
2	211	100.0	232	2 S71041	major prion protei
3	211	100.0	241	2 S71048	major prion protei
4	211	100.0	241	2 S71056	major prion protei
5	211	100.0	245	2 S71045	major prion protei
6	211	100.0	253	1 U7HU	major prion protei
7	211	100.0	253	2 I84423	major prion protei
8	211	100.0	253	2 S71055	major prion protei
9	211	100.0	253	2 S53635	prion protein - si
10	211	100.0	253	2 I77032	major prion protei
11	211	100.0	253	2 I61847	major prion protei
12	211	100.0	254	2 B34759	prion protein - ch
13	211	100.0	254	2 A34759	prion protein - ch
14	211	100.0	254	2 A23544	major prion protei
15	210	99.5	252	2 I51848	major prion protei
16	209	99.1	264	2 S71137	prion protein - gr
17	206	97.6	245	2 S53627	major prion protei
18	206	97.6	252	2 S53634	major prion protei
19	206	97.6	252	2 S53631	major prion protei
20	206	97.6	253	2 S53624	major prion protei
21	206	97.6	253	2 S53623	major prion protei
22	206	97.6	253	2 S53620	major prion protei
23	206	97.6	253	2 S53625	major prion protei
24	206	97.6	253	2 S53617	major prion protei
25	206	97.6	253	2 S53614	major prion protei
26	206	97.6	253	2 S53616	major prion protei
27	206	97.6	253	2 S53618	major prion protei
28	206	97.6	253	2 S53619	major prion protei
29	206	97.6	254	1 U0HYIH	major prion PrP-Sc

30	206	97.6	256	2 J00268	major prion protei
31	206	97.6	257	2 A23545	major prion PrP27-
32	206	97.6	264	2 A54330	major prion protei
33	205	97.2	256	2 S37149	prion protein - go
34	205	97.2	256	2 A54281	major prion protei
35	205	97.2	260	2 S53629	major prion protei
36	203	96.2	257	2 J01900	major prion protei
37	202	95.7	239	2 S53633	major prion protei
38	200	94.8	252	2 JC6175	prion protein - ra
39	61	28.9	267	1 U7CH	major prion protei
40	61	28.9	267	2 A37372	prion protein homo
41	61	28.9	273	2 A46280	prion protein - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amyloidpallulanae (
44	56	26.5	511	2 C69199	phenylalanine-tRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1

A53892

prion-related protein - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A>Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C:Superfamily: major prion protein

Query Match

Best Local Similarity 100.0%; Score 211; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 8, 6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTKGKNTFEDVKMERVVEQ 40

DB 145 NNFVHDCVNITTKQHTVTTTKGKNTFEDVKMERVVEQ 184

RESULT 2

S71041 major prion protein - black-handed spider monkey (fragment)

C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R:Scharzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437

R:Scharzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCH>

A/Cross-references: EMBL:U08309

C:Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8, 8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Callipebus moloch (fragment)
C/Species: Callipebus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 196

DB 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-229 <SCW>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 245;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 6

U08U

major prion protein precursor - human
N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C;
C/Species: Homo sapiens (man)
C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C/Accession: A24173; A40372; A50517; S14078; I54322; I58357; I59184; I79633; I796
DNA 5, 315-324, 1986
A/Title: Molecular cloning of a human prion protein cDNA.
A/Reference number: A24173; MUID:86300093; PMID:3755672
A/Accession: A24173
A/Molecule type: mRNA
A/Residues: 1-253 <KRB>
A/Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
Am. J. Hum. Genet. 49, 320-329, 1991
A/Title: Genomic structure of the human prion protein gene.
A/Reference number: A40372; MUID:91328137; PMID:1678248
A/Accession: A40372
A/Status: not compared with conceptual translation
A/Molecule type: DNA
A/Residues: 1-80, 89-253 <PUC>
A/Cross-references: GB:X83416; NID:g474846; PIDN:CAA58442.1; PID:g474847
R/Liao, Y.C.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A/Reference number: A05017; MUID:66261778; PMID:3014653
A/Accession: A05017
A/Molecule type: mRNA
A/Residues: 8-117, 119-253 <LIA>
A/Cross-references: GB:D00015; NID:g220015; PIDN:BA00011.1; PID:g220016; GB:M13667; NID:
EMBO J. 10, 513-519, 1991
A/Title: Amyloid protein of Gerstmann-Strausner-Scheinker disease (Indiana kindred) is
A/Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
R:Didelich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Detection in the prion protein gene in a demented patient.
A:Reference number: 154322; MUID:93250789; PMID:1363802
A:Accession: 154322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83, 92-240 <RES>
A:Cross-references: GB:M01929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: 168597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M01930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:92140671; PMID:1176177
A:Accession: 158135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91, 'PHCGGCGOPHHGCGQPHGCGMGOPHHGCGOPHHGGS' <RES>
A:Cross-references: GB:S60539; NID:g244698; PIDN:AAB21334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaber, D.; Swergold, G.D.; Wills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 89, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:Introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
F:1-22/Domains: signal sequence #status predicted <SIG>
F:23-230/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-O)
F:231-253/Domains: carboxyl-terminal propetide #status predicted <CRP>
F:179-214/Dissulfide bonds: #status predicted
F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:210/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)
Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,76-20; Indels 0; Gaps 0;
Matches 40; Conservative 0; Mismatches 0;
1 NNFVADCVNITIKQHTVTTTNGENFTEDVGMERVVEQ 40
173 NNFVADCVNITIKQHTVTTTNGENFTEDVGMERVVEQ 212

A: Molecule type: DNA
A: Residues: 1-253 <RES>
A: Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PID:AAA68635.1; PID:G595850
R: Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53622
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 1-210, 'R', 212-253 <SCH>
A: Cross-references: EMBL:U08307
R: Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71054
A: Molecule type: DNA
A: Residues: 1-253 <SCH>
A: Cross-references: EMBL:U08307; NID:G474372; PID:AA050095.1; PID:G474373
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9, 7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 1 NNFDVCNITTKOHTVTTTNGENFTETDVKKMERVVEQ 40
|||||
173 NNFDVCNITTKOHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C: Species: Macaca nemestrina (pig-tailed macaque)
C: Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 09-Jul-2004
C: Accession: S71055; S53626
R: Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71055
A: Molecule type: DNA
A: Residues: 1-253 <SCH>
A: Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PID:AA050094.1; PID:G474373
R: Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53626
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 8-210, 'R', 212-247 <SCW>
A: Cross-references: EMBL:U08306
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9, 7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 1 NNFDVCNITTKOHTVTTTNGENFTETDVKKMERVVEQ 40
|||||
173 NNFDVCNITTKOHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 9
S53635
prion protein - siamang
C: Species: Hylobates syndactylus (siamang)
C: Date: 15-Jul-1995 #sequence _revision 19-Apr-1996 #text_change 09-Jul-2004
C: Accession: S53635
R: Schatzl, H.M.; da Costa, M.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837289
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AA50096.1; PID:94743
A/Note: the source was designated as Symphalangus syndactylus
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I37032
R/Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40552; EMBL:U15166; NID:9563208; PIDN:AA68633.1; PID:95632
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I61847; S71060; S53615
R/Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AA68632.1; PID:96093
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCW>
A/Cross-references: EMBL:U08296; NID:9474350; PIDN:AA50085.1; PID:9474351
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-210; R, 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 12

prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathologi
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:9191182; PIDN:AAA37014.1; PID:9191183
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathologi
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:9191180; PIDN:AAA37013.1; PID:9387056
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
N/Alternate names: PrP, Scrapie prion
C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; PMID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <RES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA3997.1; PID:G200529

A/Experimental source: strains NZW and I/LmJ

A/Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain differs by 1 residue.

R/Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; PMID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A/Reference number: S02521; PMID:8816695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and

A/Reference number: A22315; PMID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHB>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl

F;1-22/Domain: signal sequence #status predicted <SIG>

F;23-231/Product: major prion protein #status predicted <MAT>

F;232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F;178-213/Disulfide bonds: #status predicted

F;180.196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F;231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

RESULT 15

161848

major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: I61848

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: I36907; PMID:95083661; PMID:7991600

A/Accession: I61848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G559582; PIDN:AAA68636.1; PID:G5958

C/Superfamily: major prion protein

Query Match 99.5%; Score 210; DB 2; Length 252;

Best Local Similarity 97.5%; Pred. No. 1.3e-19;

Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:38
Job time: 12 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(Without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218
Sequence: 1 MNFVHDCVNITTKQHTVTTKGENTEDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt_02.*
1: uniprot_sprotc.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	232	1	PRI0_ATBGE
2	211	100.0	238	1	PRI0_CERAT
3	211	100.0	238	1	PRI0_THREE
4	211	100.0	238	2	Q86XRI
5	211	100.0	240	2	Q8VHV4
6	211	100.0	241	1	PRI0_CALMO
7	211	100.0	241	1	PRI0_MANSF
8	211	100.0	245	1	PRI0_CERAE
9	211	100.0	246	1	PRI0_CERMO
10	211	100.0	246	1	PRI0_CERNE
11	211	100.0	246	1	PRI0_CERRO
12	211	100.0	246	1	PRI0_ERYRA
13	211	100.0	246	2	AA083636
14	211	100.0	248	2	Q8VHV5
15	211	100.0	252	1	PRI0_CALJA
16	211	100.0	252	1	PRI0_CEBAP
17	211	100.0	253	1	PRI0_CELGU
18	211	100.0	253	1	PRI0_GORCO
19	211	100.0	253	1	PRI0_HUMAN
20	211	100.0	253	1	PRI0_HYLDA
21	211	100.0	253	1	PRI0_HYLSY
22	211	100.0	253	1	PRI0_MACFA
23	211	100.0	253	1	PRI0_PANTR
24	211	100.0	253	1	PRI0_PONYX
25	211	100.0	253	1	PRI0_PREFR
26	211	100.0	253	2	Q6FJG8
27	211	100.0	253	2	Q6FJL9
28	211	100.0	253	2	Q9Z0T5
29	211	100.0	253	2	AA580162
30	211	100.0	253	2	AA12192
31	211	100.0	254	1	PRI0_CRIGR

32	211	100.0	254	1	PRI0_CRIMI	Q60468 cricetus
33	211	100.0	254	1	PRI0_MOUSE	P04925 mus musculus
34	211	100.0	254	1	PRI0_RAT	P13852 rattus norv
35	211	100.0	254	1	PRI0_SIGHI	Q92003 sigmodon hi
36	211	100.0	254	2	Q9Z0T4	Q92004 sigmodon fu
37	211	100.0	254	2	Q8VHV6	Q8VHV6 apodemus sy
38	211	100.0	254	2	AA019993	AA019993 rattus no
39	211	100.0	277	2	Q6SEB1	Q6SEB1 homo sapien
40	211	100.0	277	2	AA021603	AA021603 homo sapi
41	211	100.0	285	2	Q75942	Q75942 homo sapien
42	210	99.5	220	2	Q86CW7	Q86CW7 ochotona pr
43	210	99.5	248	2	Q866V6	Q866V6 diceros bic
44	210	99.5	260	1	PRI0_SAIISC	P40258 salmatri sci
45	209	99.1	215	2	Q811W3	Q811W3 spalax leuc

ALIGNMENTS

RESULT 1
PRI0_ATBGE STANDARD; PRT; 232 AA.
ID PRI0_ATBGE
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler Syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL: U08309; AAC50097.1; -
CC PIR: S71041; S71041.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER 1
CC SIGNAL 15
CC CHAIN 16 By similarity.
CC PROPEP 215 Major prion protein.
CC FT 214 Removed in mature form (By similarity).
CC LIPID 214 GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity.
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 161 181 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
FT REPEAT 44 51 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 51 Q.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKHQTHTTTTKGNTFTDVKMERVVEQ 40
DB 157 NNFVHDCVNTTKHQTHTTTTKGNTFTDVKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus aethiops, and
OC Macaca sylvanus (Barbary Ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_Taxid=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudant J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00341; Prion; 5.
CC PRINTS; PS00291; Prion; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 165 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKHQTHTTTTKGNTFTDVKMERVVEQ 40
DB 158 NNFVHDCVNTTKHQTHTTTTKGNTFTDVKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP; Synonyms=PrP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OC NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudant J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch.)
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00341; Prion; 5.
CC PRINTS; PS00291; Prion; 1.
CC PROSITE; PS00291; PRION_1; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL.
FT CHAIN
FT PROPEP
FT DISULFID
FT LIPID
FT CARBOHYD
FT CARBOHYD
FT DOMAIN
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT NON_TER
SQ SEQUENCE
  238 AA; 26104 MW; 5F59BFF602243BDB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
Q86XRI PRELIMINARY; PRT; 238 AA.
ID Q86XRI;
AC Q86XRI;
DT 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLREL. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
Q86XRI PRELIMINARY; PRT; 240 AA.
ID Q86XRI;
AC Q86XRI;

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DT 01-MAR-2002 (TRENBLREL. 20, Created)
DT 01-MAR-2002 (TRENBLREL. 20, Last sequence update)
DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 240;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
PRIO CALMO
ID PRIO CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callitriche moloch (Dukey titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitricidae;
OC Callitriche.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL: U08313; AAC50100.1; -
 DR PIR: S71048; S71048.
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; Prion; 6.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT NON_TER
 FT SIGNAL 1 1
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 >241 Major prion protein.
 FT DISULFID 172 207 Removed in mature form (By similarity).
 FT LIPID 223 GPI-anchor amidated serine (By
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013E7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3,7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPVHDCVNTTKKHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 166 NNPVHDCVNTTKKHTVTTTGGNFETTDVKKMERVVEQ 205

RESULT 7
 ID PRIO MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL: U08303; AAC50091.1; -
 DR PIR: S71056; S71056.
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; Prion; 6.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER
 FT SIGNAL 1 1
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 >241 Major prion protein.
 FT LIPID 223 GPI-anchor amidated serine (By
 FT DISULFID 172 207 similarity).
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3,7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPVHDCVNTTKKHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 166 NNPVHDCVNTTKKHTVTTTGGNFETTDVKKMERVVEQ 205

RESULT 8
 ID PRIO CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=9534; 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called

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CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      -----
DR      EMBL: U08291; AAC50080.1; -.
DR      EMBL: U08292; AAC50081.1; -.
DR      PIR: S53627; S53627.
DR      PIR: S71045; S71045.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00391; Prion, octapep; 5.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
KM      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL      1      22
FT      CHAIN      23      222
FT      PROPEP      223      245
FT      LIPID      222      222
FT      DISUFID      171      206
FT      CARBOHYD      173      173
FT      CARBOHYD      189      189
FT      DOMAIN      51      83
FT      REPEAT      51      59
FT      REPEAT      60      67
FT      REPEAT      68      75
FT      REPEAT      76      83
SQ      SEQUENCE      245 AA; 26885 MW; D582B58E2726C99A CRC64;
Query Match      100.0%; Score 211; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 3,7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB      165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      -----
DR      EMBL: U75386; AAB50625.1; -.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
KM      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL      1      15
FT      CHAIN      16      223
FT      PROPEP      224      246
FT      LIPID      223      223
FT      DISUFID      172      207
FT      CARBOHYD      174      174
FT      CARBOHYD      190      190
FT      DOMAIN      44      84
FT      REPEAT      44      52
FT      REPEAT      53      60
FT      REPEAT      61      68
FT      REPEAT      69      76
FT      REPEAT      77      84
SQ      SEQUENCE      246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match      100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3,8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB      166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

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```

RESULT 9
PRIO_CERMO STANDARD; PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Bakaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_Taxid=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."

```

```

RESULT 10
PRIO_CERNE STANDARD; PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (Debrazza's monkey).
OC Bakaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_Taxid=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

RA van der Kuyl A.C., Dekker J.T., Goudamit J.,
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL: U75387; AAB50626.1; -
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00391; Prion octapep; 6.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 FT SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTKGENTETEDVQMERVVEQ 40
 DB 166 NNFFVHDCVNTTIKQHTVTTTKGENTETEDVQMERVVEQ 205
 RESULT 11
 ID PRIOT_CERTO STANDARD; PRT; 246 AA.
 AC Q95176;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecidae;

OX NCBI_TaxID=9531;
 RN [1]
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.,
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL: U75385; AAB50628.1; -
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00391; Prion octapep; 6.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 FT SEQUENCE 246 AA; 26914 MW; F58679CBBCSADCT CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTKGENTETEDVQMERVVEQ 40
 DB 166 NNFFVHDCVNTTIKQHTVTTTKGENTETEDVQMERVVEQ 205
 RESULT 12
 ID PRIOT_ERYPA STANDARD; PRT; 246 AA.
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Erythrocybus patas (Red guenon) (Cercopithecus patas).

CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecoidea; Erythrocebus.
 CC NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudant J.,
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----
 CC EMBL: U75388; AAB50627.1; --
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF03991; Prion; 1.
 CC Prion: PF03991; Prion; octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KMW Glycoprotein; GPI-anchor; Lipoprotein; prion; Repeat; signal.
 FT NON_TER 1 1
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 FT SEQUENCE 246 AA; 26886 MW; D35D105B8EC53108 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 40
 Db 166 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 205
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (Tremblrel. 27, Created)
 DT 02-MAR-2004 (Tremblrel. 27, Last sequence update)
 DT 02-MAR-2004 (Tremblrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 CC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.,
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC
 CC EMBL: AY219883; AAO83636.1; --
 CC Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 FT SEQUENCE 246 AA; 26884 MW; 309B1B13C0841566 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 40
 Db 166 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 205
 RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (Tremblrel. 20, Created)
 DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
 DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC Clethrionomys.
 CC NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.,
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC
 CC EMBL: AF367624; AAL57231.1; --
 CC -1- SIMILARITY: Belongs to the prion family.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF03991; Prion; 1.
 CC Prion: PF03991; Prion; octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion.
 FT NON_TER 248 248
 FT SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 40
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVVEQ 212
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

```

DT 05-JUN-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Callithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callithrix.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.R., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U08304; AAC50092.1; -.
DR PIR: S53634; S53634.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03977; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00391; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SROUNCE 252 AA; 27639 MW; B280B60F5DC664 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:28
 Job time: 64.6557 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKFNFTETDKMERVVEQ 40

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*
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2: /cgn2_6/prodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/prodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/prodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/prodata/1/iaa/PCUTS_COMB.pep:*
6: /cgn2_6/prodata/1/iaa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	142	1	US-08-556-823-10 Sequence 10, Appl
2	211	100.0	245	4	US-09-431-887-5 Sequence 5, Appl
3	211	100.0	245	4	US-09-431-887-15 Sequence 15, Appl
4	211	100.0	252	4	US-09-431-887-13 Sequence 13, Appl
5	211	100.0	252	4	US-09-431-887-17 Sequence 17, Appl
6	211	100.0	253	1	US-08-242-188-2 Sequence 2, Appl
7	211	100.0	253	1	US-08-509-261A-2 Sequence 2, Appl
8	211	100.0	253	1	US-08-660-626-8 Sequence 8, Appl
9	211	100.0	253	1	US-08-692-892-2 Sequence 2, Appl
10	211	100.0	253	2	US-08-713-939A-2 Sequence 2, Appl
11	211	100.0	253	2	US-08-868-162A-22 Sequence 22, Appl
12	211	100.0	253	3	US-09-031-168-8 Sequence 8, Appl
13	211	100.0	253	3	US-09-128-450-10 Sequence 20, Appl
14	211	100.0	253	3	US-09-036-579-2 Sequence 2, Appl
15	211	100.0	253	3	US-09-823-494-20 Sequence 20, Appl
16	211	100.0	253	3	US-09-550-374-2 Sequence 2, Appl
17	211	100.0	253	4	US-09-431-887-1 Sequence 1, Appl
18	211	100.0	253	4	US-09-431-887-2 Sequence 2, Appl
19	211	100.0	253	4	US-09-431-887-3 Sequence 3, Appl
20	211	100.0	253	4	US-09-431-887-4 Sequence 4, Appl
21	211	100.0	253	4	US-09-431-887-7 Sequence 7, Appl
22	211	100.0	253	4	US-09-431-887-8 Sequence 8, Appl
23	211	100.0	253	4	US-09-431-887-9 Sequence 9, Appl
24	211	100.0	253	4	US-09-431-887-10 Sequence 10, Appl
25	211	100.0	253	4	US-09-431-887-11 Sequence 11, Appl
26	211	100.0	253	4	US-09-431-887-12 Sequence 12, Appl
27	211	100.0	253	4	US-09-431-887-14 Sequence 14, Appl

28	211	100.0	253	4	US-09-431-887-16 Sequence 16, Appl
29	211	100.0	253	4	US-09-431-887-18 Sequence 18, Appl
30	211	100.0	253	4	US-09-431-887-19 Sequence 19, Appl
31	211	100.0	253	4	US-09-943-906-2 Sequence 2, Appl
32	211	100.0	253	4	US-09-669-516C-8 Sequence 8, Appl
33	211	100.0	253	4	US-09-919-172-57 Sequence 57, Appl
34	211	100.0	253	4	US-09-976-594-72 Sequence 72, Appl
35	211	100.0	253	4	US-09-904-987-3 Sequence 3, Appl
36	211	100.0	254	1	US-08-242-188-1 Sequence 1, Appl
37	211	100.0	254	1	US-08-509-261A-1 Sequence 1, Appl
38	211	100.0	254	1	US-08-660-626-7 Sequence 7, Appl
39	211	100.0	254	1	US-08-692-892-1 Sequence 1, Appl
40	211	100.0	254	2	US-08-713-939A-1 Sequence 1, Appl
41	211	100.0	254	2	US-08-868-162A-21 Sequence 21, Appl
42	211	100.0	254	3	US-09-031-168-7 Sequence 7, Appl
43	211	100.0	254	3	US-09-128-450-19 Sequence 19, Appl
44	211	100.0	254	3	US-09-128-450-28 Sequence 28, Appl
45	211	100.0	254	3	US-09-036-579-1 Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10

Sequence 10, Application US/08556823
Patent No. 5750361

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko
TITLE OF INVENTION: Formation and use of prion protein

TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California

COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823

FILING DATE:
CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg

REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001

TELEPHONE: (415) 322-5070
TELECOMMUNICATION INFORMATION:

INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 3.2e-22; Indels 0; Gaps 0;
Matches 40; Conservative 0; Mismatches 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKFNFTETDKMERVVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTGGKFNFTETDKMERVVEQ 123

RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 204

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 204

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 211

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 211

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Karl Bobicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5769655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Greg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
CORRESPONDENCE ADDRESS: 4
ADDRESS: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 654-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVDCVNITIKQHTVTTTKGSEFTETDVKKMERVVEQ 40
DB 173 NNFFVDCVNITIKQHTVTTTKGSEFTETDVKKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846513
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVDCVNITIKQHTVTTTKGSEFTETDVKKMERVVEQ 40
DB 173 NNFFVDCVNITIKQHTVTTTKGSEFTETDVKKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESS: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 621149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suetete
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match

Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40

Db 173 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

RESULT 15

US-09-823-494-20

/ Sequence 20; Application US/09823494

/ Patent No. 6355610

/ GENERAL INFORMATION:

/ APPLICANT: Chesebro, Bruce W

/ APPLICANT: Caughey, Byron W

/ APPLICANT: Chabry, Joelle

/ APPLICANT: Priola, Suseete

/ TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion

/ FILE REFERENCE: 50121

/ CURRENT APPLICATION NUMBER: US/09/823,494

/ PRIOR FILING DATE: 2001-03-30

/ PRIOR FILING DATE: 09/128,450

/ NUMBER OF SEQ ID NOS: 29

/ SOFTWARE: PatentIn Ver. 2.0

/ SEQ ID NO 20

/ LENGTH: 253

/ TYPE: PRT

/ ORGANISM: Homo sapiens

US-09-823-494-20

Query Match

Best Local Similarity 100.0%; Score 211; DB 3; Length 253;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40

Db 173 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

Search completed: December 3, 2004, 00:18:55
Job time: 15.1475 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGTGENTEDVKKMERVZQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*
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3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
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16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tilsack, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Beef Local Similarity 100.0%; Pred. No. 4.9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 52 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 91

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufendiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050, 898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 52 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 91

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166

PRIOR FILING DATE: 2002-01-21

PRIOR APPLICATION NUMBER: 10/050,902

PRIOR FILING DATE: 2002-01-18

NUMBER OF SEQ ID NOS: 164

SOFTWARE: PatentIn version 3.1

SEQ ID NO 89

LENGTH: 117

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 52 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 91

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050, 902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrPc construct
US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 53 NNFFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 92

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 53 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellucidoli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,550
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 53 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lührs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 84 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Baran, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PEP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 82 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

1 CURRENT APPLICATION NUMBER: US/10/104,047
2 CURRENT FILING DATE: 2002-03-25
3 PRIOR APPLICATION NUMBER:
4 PRIOR FILING DATE:
5 NUMBER OF SEQ ID NOS: 4096
6 SOFTWARE: PatentIn Ver. 2.1
7 SEQ ID NO 2013
8 LENGTH: 163
9 TYPE: PRF
10 ORGANISM: Homo sapiens
11 US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 211; DB 14; Length 163;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122

RESULT 10
US-09-745-003-12
1 Sequence 12, Application US/09745003
2 Patent No. US20020042122A1
3 GENERAL INFORMATION:
4 APPLICANT: Bazan, Fernando J
5 TITLE OF INVENTION: Human Proteins; Related Reagents
6 FILE REFERENCE: PRP2
7 CURRENT APPLICATION NUMBER: US/09/745,003
8 CURRENT FILING DATE: 2000-12-20
9 NUMBER OF SEQ ID NOS: 13
10 SOFTWARE: PatentIn Ver. 2.0
11 SEQ ID NO 12
12 LENGTH: 164
13 TYPE: PRF
14 ORGANISM: rodent
15 US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 211; DB 9; Length 164;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 11
US-10-470-848-10
1 Sequence 10, Application US/10470848
2 Publication No. US20040137421A1
3 GENERAL INFORMATION:
4 APPLICANT: President of Tohoku University
5 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
6 FILE REFERENCE: PH-1224-PCF
7 CURRENT APPLICATION NUMBER: US/10/470,848
8 CURRENT FILING DATE: 2003-07-31
9 PRIOR APPLICATION NUMBER: JP 2001-24279
10 PRIOR FILING DATE: 2001-01-31
11 NUMBER OF SEQ ID NOS: 10
12 SOFTWARE: PatentIn Ver. 2.0
13 SEQ ID NO 10
14 LENGTH: 200
15 TYPE: PRF
16 ORGANISM: Homo sapiens
17 US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 200;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 182

RESULT 12
US-10-470-848-3
1 Sequence 3, Application US/10470848
2 Publication No. US20040137421A1
3 GENERAL INFORMATION:
4 APPLICANT: President of Tohoku University
5 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
6 FILE REFERENCE: PH-1224-PCF
7 CURRENT APPLICATION NUMBER: US/10/470,848
8 CURRENT FILING DATE: 2003-07-31
9 PRIOR APPLICATION NUMBER: JP 2001-24279
10 PRIOR FILING DATE: 2001-01-31
11 NUMBER OF SEQ ID NOS: 10
12 SOFTWARE: PatentIn Ver. 2.0
13 SEQ ID NO 3
14 LENGTH: 208
15 TYPE: PRF
16 ORGANISM: Homo sapiens
17 US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 13
US-10-745-393-1
1 Sequence 1, Application US/10745393
2 Publication No. US20040203131A1
3 GENERAL INFORMATION:
4 APPLICANT: Scholz, Elke
5 APPLICANT: Scholz, Christian
6 APPLICANT: Schatz, Werner
7 TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
8 FILE REFERENCE: 12290 US3 (9793/141)
9 CURRENT APPLICATION NUMBER: US/10/745,393
10 CURRENT FILING DATE: 2003-12-23
11 PRIOR APPLICATION NUMBER: EP 0115225.3
12 PRIOR FILING DATE: 2001-06-22
13 PRIOR APPLICATION NUMBER: EP 01120939.2
14 PRIOR FILING DATE: 2001-08-31
15 PRIOR APPLICATION NUMBER: US 10/167,774
16 PRIOR FILING DATE: 2002-06-10
17 PRIOR APPLICATION NUMBER: US 10/179,905
18 PRIOR FILING DATE: 2002-06-24
19 NUMBER OF SEQ ID NOS: 3
20 SOFTWARE: PatentIn version 3.1
21 SEQ ID NO 1
22 LENGTH: 208
23 TYPE: PRF
24 ORGANISM: Homo sapiens
25 US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 211; DB 17; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14


```
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-6

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

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Job time : 47.3443 secs
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

Sequence: 1 SNQNNFVHDCVNTIKQHTV.....ENFTETDVAMERIVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	117	5	ABG94357 Modified
2	244	100.0	117	5	ABG80669 Human prl
3	244	100.0	117	7	ADD24196 Modified
4	244	100.0	142	2	AAW17686 Prion pro
5	244	100.0	163	7	ADB63859 Human pro
6	244	100.0	200	5	ABG31907 Human prl
7	244	100.0	208	3	ABG07318 Human prl
8	244	100.0	208	5	ABG31902 Human prl
9	244	100.0	208	5	ABG31902 Human prl
10	244	100.0	245	4	AAW72352 Cercopit
11	244	100.0	245	4	AAW72352 Cercopit
12	244	100.0	253	2	AAW86715 Human prl
13	244	100.0	253	2	AAW86715 Human prl
14	244	100.0	253	2	AAW85901 Human prl
15	244	100.0	253	2	AAW85901 Human prl
16	244	100.0	253	2	AAW85901 Human prl
17	244	100.0	253	3	AAW85901 Human prl
18	244	100.0	253	3	AAW85901 Human prl
19	244	100.0	253	3	AAW85901 Human prl
20	244	100.0	253	4	AAW85901 Human prl
21	244	100.0	253	4	AAW85901 Human prl
22	244	100.0	253	4	AAW85901 Human prl
23	244	100.0	253	4	AAW85901 Human prl
24	244	100.0	253	4	AAW85901 Human prl
25	244	100.0	253	4	AAW85901 Human prl

26	244	100.0	253	4	AAW85901 Human prl
27	244	100.0	253	4	AAW85901 Human prl
28	244	100.0	253	4	AAW85901 Human prl
29	244	100.0	253	4	AAW85901 Human prl
30	244	100.0	253	4	AAW85901 Human prl
31	244	100.0	253	4	AAW85901 Human prl
32	244	100.0	253	4	AAW85901 Human prl
33	244	100.0	253	4	AAW85901 Human prl
34	244	100.0	253	4	AAW85901 Human prl
35	244	100.0	253	4	AAW85901 Human prl
36	244	100.0	253	4	AAW85901 Human prl
37	244	100.0	253	4	AAW85901 Human prl
38	244	100.0	253	4	AAW85901 Human prl
39	244	100.0	253	4	AAW85901 Human prl
40	244	100.0	253	4	AAW85901 Human prl
41	244	100.0	253	4	AAW85901 Human prl
42	244	100.0	253	4	AAW85901 Human prl
43	244	100.0	253	4	AAW85901 Human prl
44	244	100.0	253	4	AAW85901 Human prl
45	244	100.0	253	4	AAW85901 Human prl

ALIGNMENTS

RESULT 1
ABG94357 standard; protein; 117 AA.

AC ABG94357;

DT 10-DEC-2002 (first entry)

DE Modified human prion protein fragment.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytotoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;

KV vaccine; infectious disease.

XX Homo sapiens.

XX WO200256905-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002WO-1B000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326988P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;

XX Ploesek C;

XX WPI: 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious

XX diseases.

XX Disclosure; Page 441; 441BP; English.

XX This invention relates to a novel ordered and repetitive antigen array

XX used in the production of vaccines for infectious diseases. The invention

XX also discloses a composition comprising a non-natural molecular scaffold

XX comprising a core particle selected from a core particle of a non-natural

XX origin and a core particle of natural origin and an organiser comprising

XX at least one first attachment site, where the organiser is connected to

XX the core particle by at least one covalent bond. Also disclosed is an

XX antigen or antigenic determinant with at least one second attachment

XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abetal-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC
 SQ Sequence 117 AA;

Query Match 100.0%; Score 244; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNNNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC I 46
 |||||
 DB 49 SNNNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC I 94

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Human prion protein/cysteine-containing peptide fusion protein.
 XX

Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant;
 KW graft versus host disease; Igs-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Homo sapiens.
 OS Synthetic.
 PN MO200256907-A2.
 PN
 PD 25-JUL-2002.
 PD
 PF 21-JAN-2002; 2002MO-IB000168.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-032698P.
 PR 07-NOV-2001; 2001US-0331045P.
 PR
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVAARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTW/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P., Lechner F., Ortman R., Luboend R., Staufenbiel M., Frey P,

PI Renner WA, Bachmann M, Tisot A, Sebbel P, Ploseck C;
 DR WPI; 2002-636514/68.
 XX

P7 Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX

PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; and (c) an antigen or antigenic determinant
 CC occurring with the antigen or antigenic determinant; and where the second
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igs-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified to
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX
 SQ Sequence 117 AA;

Query Match 100.0%; Score 244; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNNNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC I 46
 |||||
 DB 49 SNNNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC I 94

RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Modified human prion protein amino acid sequence.
 XX

KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 XX
 OS Synthetic.
 OS Prion.
 PN MO2003059386-A2.
 PN
 PD
 PF
 XX

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 PF
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 PI WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 244; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
 49 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCI 94
 DB
 RESULT 4
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 XX AAM17686;
 AC
 XX 14-JAN-1998 (first entry)
 DT
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 XX Homo sapiens.
 OS
 XX
 XX W09716728-A1.
 PN
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96WO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556823.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX

PI Prusiner SB, Kaneko K, Cohen FE;
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PT
 XX Claim 11; Page 7-38; 50pp; English.
 PS
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 XX ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment of prion-related diseases e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 244; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 6.7e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
 81 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCI 126
 DB
 RESULT 5
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 XX ADB63859;
 AC
 XX 04-DEC-2003 (first entry)
 DT
 XX Human protein encoded by clone ASTRO2005570.
 DE
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 XX Homo sapiens.
 OS
 XX
 XX EP1308459-A2.
 PN
 XX 07-MAY-2003.
 PD
 XX 28-MAR-2002; 2002EP-00007401.
 PF
 XX 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 PR
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Iisogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 DR
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 XX Claim 1; Page; 222pp; English.
 PS
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel

CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or peptide
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC medicines may be included in them, for developing a diagnostic marker or
 CC genes may be included in them, for developing a diagnostic marker or
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transceptor-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g., osteoporosis,
 CC neurological diseases, cancer, tumors). The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

SO Sequence 163 AA;

Query Match 100.0%; Score 244; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 7.8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETFDVQMERVVEQMC 46
 DB 80 SNQNNFVHDCVNTTKQHTVTTTGGNFETFDVQMERVVEQMC 125

RESULT 6
 ID AAB07318 standard; protein; 200 AA.
 AC AAB07318;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KW Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN MO200261418-A1.
 PD 08-AUG-2002.
 PF 31-JAN-2002; 2002MO-JP000803.
 PR 31-JAN-2001; 2001JP-00024279.
 PA (TOHO) UNIV TOHOKU.
 PI Kitamoto T, Miyoshi K, Mohri S;
 XX
 DR WPI; 2002-619277/66.
 XX

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Example 2; Page 63-64; 69pp; Japanese.
 XX

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)

CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

SO Sequence 200 AA;

Query Match 100.0%; Score 244; DB 5; Length 200;
 Best Local Similarity 100.0%; Pred. No. 9.9e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETFDVQMERVVEQMC 46
 DB 140 SNQNNFVHDCVNTTKQHTVTTTGGNFETFDVQMERVVEQMC 185

RESULT 7
 ID AAB07318 standard; protein; 208 AA.
 AC AAB07318;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Homo sapiens.
 XX
 PN
 PD
 PF
 PR
 PA (WALF-) WALFAC OY.
 PI (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-387880/33.
 XX

PT Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 PT
 PS Disclosure; Page 43-44; 50pp; English.
 XX

CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;
SQ Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 8
AAB07329 standard; protein; 208 AA.
ID AAB07329;
AC AAB07329;
XX 17-OCT-2000 (first entry)
XX Human prion protein sequence.
XX Human prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX Homo sapiens.
XX Key Location/Qualifiers
XX Region 29..69
FT /note="Repeat region consisting of tandem repeats of
FT repeat unit: PHGGMGQ (AAB07319)"
FT Modified-site 157..192
FT /note="C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"

XX WO200029849-A1.
XX 25-MAY-2000.
XX 27-OCT-1999; 99WO-FI000896.
XX 17-NOV-1998; 98FI-00002480.
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-399778/34.
XX New immunassay for prion protein, used for determination of
XX transmissible spongiform encephalopathies in mammals, comprises specific
XX capture antibody.
XX Disclosure; Page 43-44; 50pp; English.
XX The present sequence is the human prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
SQ Sequence 208 AA;
Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 9
ABG31902 standard; protein; 208 AA.
ID ABG31902;
AC ABG31902;
XX 05-NOV-2002 (first entry)
XX Human prion protein related protein #2.
XX Prion; human; follicular dendritic cells; FDC; infection;
XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX Homo sapiens.
XX WO200261418-A1.
XX 08-AUG-2002.
XX 31-JAN-2002; 2002MO-JP000803.
XX 31-JAN-2001; 2001JP-00024279.
XX (TOHO) UNIV TOHOKU.
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX Disclosure; Page 49-50; 69pp; Japanese.
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention
SQ Sequence 208 AA;
Query Match 100.0%; Score 244; DB 5; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNITIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 10
AAB72342 standard; peptide; 245 AA.
ID AAB72342;
AC AAB72342;
XX 06-AUG-2003 (revised)
XX 17-MAY-2001 (first entry)

XX (REGC) UNIV CALIFORNIA.
 PA Prusiner SB, Scott MR, Telling G;
 PI WPI, 1996-010868/01.
 XX
 DR Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.
 XX
 PS Disclosure; Page 41-42; 65pp; English.
 XX
 CC Pathogenic prions in a sample can be detected by injecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. human) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding human PrP
 CC sequence. The chimeric PrP, designated Mhu2MPp, differs from the MoPrP
 CC by 9 AA between residues 96 and 167
 XX
 SQ Sequence 253 AA:
 XX
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTIKQHTVTTTKGKFNFTETDVKMERVVEQMC 46
 DB 170 SNQNNFVHDCVNTIKQHTVTTTKGKFNFTETDVKMERVVEQMC 215
 XX
 RESULT 13
 ID AAM69660 standard; protein; 253 AA.
 XX
 AC AAM69660;
 XX
 DT 25-MAR-2003 (revised)
 DT 19-OCT-1998 (first entry)
 XX
 DE Human prion protein HuPrP.
 XX
 KM Human; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS
 XX US5792901-A.
 XX
 PN 11-AUG-1998.
 XX
 PD 30-JUL-1996; 96US-00692892.
 XX
 PF 13-MAY-1994; 94US-00242188.
 XX 31-JUL-1995; 95US-00509261.
 PR 31-AUG-1995; 95US-00521992.
 XX
 PA (REGC) UNIV CALIFORNIA.
 PA
 PI Scott MR, Telling GC, Prusiner SB;
 XX
 XX WPI, 1998-456207/39.
 DR Transgenic mouse with altered PrP gene - for detecting disease-causing
 PT prions.
 PT
 PS Example 8; Fig 3; 37pp; English.
 XX
 XX A transgenic mouse has been developed which comprises a genome in which
 CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
 CC ablated, the genome containing operatively inserted all exogenous non-

CC mouse PrP gene. The mouse is susceptible to infection with prions which
 CC generally only infect a genetically diverse mammal due to the presence of
 CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
 CC symptoms of prion disease within 200 days or less after inoculation with
 CC prions which generally only infect a genetically diverse mammal. Also
 CC described in the present invention are: (A) a method of producing the
 CC transgenic mouse; and (B) determining the presence of infectious prions
 CC in a sample obtained from a bovine. The transgenic mouse is used to
 CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
 CC disease of humans caused by prions. The present sequence represents human
 CC prion protein (HuPrP), used in an example from the present invention.
 CC (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 253 AA:
 XX
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTIKQHTVTTTKGKFNFTETDVKMERVVEQMC 46
 DB 170 SNQNNFVHDCVNTIKQHTVTTTKGKFNFTETDVKMERVVEQMC 215
 XX
 RESULT 14
 ID AAM85901 standard; peptide; 253 AA.
 XX
 AC AAM85901;
 XX
 DT 12-FEB-1999 (first entry)
 XX
 DE Human prion protein (PrP) sequence.
 XX
 KM PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
 KM Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
 KM cosmetic; therapeutic; human.
 XX
 OS Homo sapiens.
 OS
 XX US5846533-A.
 XX
 PN 08-DEC-1998.
 XX
 PD 13-SEP-1996; 96US-00713939.
 XX
 PF 14-SEP-1995; 95US-00528104.
 PR
 XX
 PA (REGC) UNIV CALIFORNIA.
 PA (SCRI) SCRIPPS RES INST.
 PA
 PI Prusiner SB, Williamson RA, Burton DR;
 XX
 XX WPI, 1999-058996/05.
 DR Antibody specific for scrapie isoform of prion protein - useful for
 PT diagnosis and therapy.
 PT
 PS Disclosure; Col 41-42; 58pp; English.
 XX
 XX This represents a human prion protein (PrP) sequence. The invention
 CC relates to an antibody that is capable of binding to native PrP(Sc), the
 CC scrapie isoform of PrP. The antibody is produced by a method that
 CC comprises synthesizing a library of antibodies on phages, contacting the
 CC phages with a composition containing PrP proteins, isolating phages that
 CC bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
 CC and optionally analysing the phages to determine a nucleic acid sequence
 CC encoding an amino acid sequence to which the native PrP(Sc) binds. The
 CC antibody is used to detect disease-associated PrP, especially in
 CC Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
 CC can also be used to neutralise the infectivity of PrP(Sc). Assays using
 CC the antibodies can be used to screen for disease-associated PrP in
 CC pharmaceutical products, foods and cosmetics or for therapeutic purposes

XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 15

AA07994
ID AA07994 standard; protein; 253 AA.

AC AA07994;

DT 08-JUL-1999 (first entry)

DE Human prion protein.

KW Prion protein; PrP; human; polyclonal antiserum; immunoassay; detection;
bovine; murine.

OS Homo sapiens.

PN DE19745443-A1.

PD 22-APR-1999.

PF 15-OCT-1997; 97DE-01045443.

PR 15-OCT-1997; 97DE-01045443.

PA (HERZ/) HERZOG-MESMER A.

PI Meesmer AH, Kiselev OI, Scheller A;

DR WPI; 1999-255775/22.

PT Diagnostic polyclonal antiserum specific for prion protein - obtained by
immunisation with metal-containing polypeptide.

PS Claim 3; Fig 1; 12pp; German.

CC This invention describes a novel process for producing a polyclonal
antiserum against a human or animal prion protein (PrP) which can be used
in immunoassays for detecting PrP's. The method comprises (a) selecting a
polypeptide that has a length of at least 10 amino acids and has an amino
acid sequence at least 70% homologous to that of human, bovine or murine
PrP in a region of at least 10 consecutive amino acids (b) binding a
metal to the polypeptide by reaction with a metal compound and (c)
injecting the metal-containing polypeptide into a host animal, optionally
together with adjuvants, to induce production of a polyclonal antiserum

CC Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215

Search completed: December 3, 2004, 00:55:38
Job time : 77.1639 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

Sequence: 244 1 SNQNNFVHDCVNITIKQHTV.....ENFTETDVKMERVVEQWCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	ID	Description
1	244	100.0	241 2 S71048	major prion protei
2	244	100.0	241 2 S71056	major prion protei
3	244	100.0	245 2 S71045	major prion protei
4	244	100.0	253 1 U0HU	major prion protei
5	244	100.0	253 2 184423	major prion protei
6	244	100.0	253 2 S71055	major prion protei
7	244	100.0	253 2 137032	major prion protei
8	243	99.6	226 2 A53892	prion-related prot
9	243	99.6	252 2 161848	major prion protei
10	243	99.6	254 2 A23544	major prion protei
11	242	99.2	264 2 S37137	prion protein - gr
12	241	98.8	232 2 S71041	major prion protei
13	240	98.4	254 2 B34759	prion protein - go
14	240	98.4	254 2 A34759	prion protein - Ch
15	239	98.0	245 2 S33627	major prion protei
16	239	98.0	252 2 S53631	major prion protei
17	239	98.0	253 2 S53624	major prion protei
18	239	98.0	253 2 S53623	major prion protei
19	239	98.0	253 2 S53620	major prion protei
20	239	98.0	253 2 S53625	major prion protei
21	239	98.0	253 2 S53635	prion protein - si
22	239	98.0	253 2 S53614	major prion protei
23	239	98.0	253 2 161847	major prion protei
24	239	98.0	253 2 S53616	major prion protei
25	239	98.0	253 2 S53619	major prion protei
26	239	98.0	253 2 U0268	major prion protei
27	239	98.0	256 2 A54330	major prion protei
28	239	98.0	264 2 S37149	prion protein - go
29	238	97.5	256 2	

30	238	97.5	256 2 A54281	major prion protei
31	238	97.5	260 2 S53629	major prion protei
32	236	96.7	252 2 S53634	major prion protei
33	235	96.3	259 2 S53633	major prion protei
34	235	96.3	257 2 JQ1900	major prion protei
35	234	95.9	253 2 S53617	major prion protei
36	233	95.5	252 2 JG6175	prion protein - ra
37	232	95.1	254 1 U0HYH	major prion PrP-Sc
38	232	95.1	257 2 A23545	major prion PrP-Sc
39	222	95.1	257 2 A37372	prion protein homo
40	77	31.6	267 1 U0CH	major prion protei
41	76	31.1	273 2 A46280	prion protein - ch
42	61.5	25.2	533 1 D71338	probable ribose/ga
43	60.5	24.8	182 2 A10130	conserved hypotet
44	59	24.2	139 2 H90004	hypothetical prote
45	58.5	24.0	258 2 AF2524	hypothetical prote

ALIGNMENTS

RESULT 1
S71048
major prion protein - Calliobus moloch (fragment)
C:Species: Calliobus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:ACG50100.1; PID:g475585
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 2
S71056
major prion protein - mandrill (fragment)
C:Species: Papio sphinx. Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:ACG50091.1; PID:g474364
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621

RESULT 5

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C>Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I61423; S53622; S71054

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A>Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; PMID:95083661; PMID:7991600

A:Accession: I61423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA68635.1; PID:G5958

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates

A:Reference number: S53614; PMID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AA050095.1; PID:G474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 170 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 215

RESULT 6

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AA050094.1; PID:G4743

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates

A:Reference number: S53614; PMID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCH>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 215

RESULT 7

137032

major prion protein precursor - gorilla

C:Species: Gorilla gorilla (gorilla)

C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C:Accession: I37032

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A>Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; PMID:95083661; PMID:7991600

A:Accession: I37032

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G5632

C:Superfamily: major prion protein

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 215

RESULT 8

A53892

prion-related protein - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C:Accession: A53892

R:Li, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A>Title: Cloning of rat "prion-related protein" cDNA.

A:Reference number: A53892; PMID:88037055; PMID:2889848

A:Accession: A53892

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-226 <LIA>

A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C:Superfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 226;

Best Local Similarity 97.8%; Pred. No. 1.7e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 46
 Db 142 SNQNNFVHDCVNTTIKQHTVTTTNGENFTETDVKKMERVVEQMCI 187

RESULT 9

I61848

major prion protein precursor - common squirrel monkey

C:Species: Saimiri sciureus (common squirrel monkey)

C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C:Accession: I61848

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A>Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; PMID:95083661; PMID:7991600

A:Accession: I61848

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-252 <RES>

A:Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G595852; PIDN:AAA68636.1; PID:G5958

C:Superfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 252;
 Best Local Similarity 97.8%; Pred. No. 1.9e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46
 DB 169 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 214

RESULT 10

A23544

Major prion protein precursor - mouse

C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; 502521; A22315

R/Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:9200528; PIDN:AAA39997.1; PID:9200528

A/Experimental source: strains NZM and I/Lnd

A/Note: the sequence shown is from the NZM strain; the sequence from the I/Lnd strain is

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaupt, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (Prp) in mouse brain

A/Reference number: 502521; MUID:88166695; PMID:2894984

A/Accession: 502521

A/Molecule type: protein

A/Residues: 1-254 <HOB>

R/Chesedro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A23315; MUID:85213844; PMID:3923361

A/Accession: A23315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHB>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F:1-22/Dominant: signal sequence #status predicted <SIG>

F:23-231/Product: major prion protein #status predicted <MAT>

F:232-254/Dominant: carboxyl-terminal propeptide #status predicted <CTP>

F:178-213/Dominant: carboxyl-terminal propeptide #status predicted

F:180-196/Binding site: carbohydrate (asn) (covalent) #status predicted

F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (1n mature form

Query Match 99.6%; Score 243; DB 2; Length 254;

Best Local Similarity 97.8%; Pred. No. 1.9e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

DB 169 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 214

RESULT 11

637137

Prion protein - greater kudu

C/Species: Tragelaphus strepericeros (greater kudu)

C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C/Accession: 637137

R/Martin, T.C.; Hughes, S.L.; Hughes, K.V.; Dawson, M.

submitted to the EMBL Data Library, August 1993

A/Reference number: 637137

A/Accession: 637137

A/Status: Preliminary

A/Molecule type: DNA

A/Residues: 1-264 <MAR>

A/Cross-references: UNIPROT:P40242; EMBL:X74771; NID:9398937; PIDN:CAA52781.1; PID:93989

C/Superfamily: major prion protein

Query Match 99.2%; Score 242; DB 2; Length 264;

Best Local Similarity 95.7%; Pred. No. 2.7e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

DB 181 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 226

RESULT 12

S71041

Major prion protein - black-handed spider monkey (fragment)

C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:9474376; PIDN:AA50097.1; PID:94743

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCW>

A/Cross-references: EMBL:U08309

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 241; DB 2; Length 232;

Best Local Similarity 97.8%; Pred. No. 3.1e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

DB 154 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 199

RESULT 13

B34759

Prion protein - golden hamster

C/Species: Mesocricetus auratus (golden hamster)

C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999

C/Accession: B34759

R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,

Mol. Cell. Biol. 10, 1153-1163, 1990

A/Title: Three hamster species with different scrapie incubation times and neuropathology

A/Reference number: A34759; MUID:90158578; PMID:2406562

A/Accession: B34759

A/Status: Preliminary

A/Molecule type: DNA

A/Residues: 1-254 <LOW>

A/Cross-references: GB:M33959; NID:9191182; PIDN:AAA37014.1; PID:9191183

C/Superfamily: major prion protein

Query Match 98.4%; Score 240; DB 2; Length 254;

Best Local Similarity 95.7%; Pred. No. 4.5e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

DB 170 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 215

RESULT 14

A34759
prion protein - Chinese hamster
C:Species: Cricetus griseus (Chinese hamster)
C:Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C:Accession: A34759
R:Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner, M.J. Cell Biol. 10, 1153-1163, 1990
A:Title: Three hamster species with different scrapie incubation times and neuropathology
A:Reference number: A34759; MUID:90158578; PMID:2406562
A:Accession: A34759
A:Status: Preliminary
A:Molecule type: DNA
A:Residues: 1-254 <LOW>
A:Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C:Superfamily: major prion protein

Query Match 98.4%; Score 240; DB 2; Length 254;
Best Local Similarity 95.7%; Pred. No. 4.5e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMC 46
:|||||
Db 170 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 215

RESULT 15

S53627
major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 239; DB 2; Length 245;
Best Local Similarity 97.8%; Pred. No. 5.8e-22;
Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMC 46
:|||||
Db 162 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMC 207

Search completed: December 3, 2004, 00:38:39
Job time : 13.8 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221
Sequence: 244
1 SNQNNFVHDCVNITIKQHTV.....ENFTETDYKMERVVEQMC1 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02: *
1: uniprot_sprot: *
2: uniprot_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	238	1	PRIO_CERAT
2	244	100.0	238	1	PRIO_THEGE
3	244	100.0	238	1	PRIO_CERAT
4	244	100.0	241	1	PRIO_CALMO
5	244	100.0	241	1	PRIO_MANSP
6	244	100.0	245	1	PRIO_CERAT
7	244	100.0	246	1	PRIO_CERAT
8	244	100.0	246	1	PRIO_CERAT
9	244	100.0	246	1	PRIO_CERAT
10	244	100.0	246	1	PRIO_CERAT
11	244	100.0	246	2	AA083636
12	244	100.0	252	1	PRIO_CERAT
13	244	100.0	252	1	PRIO_CERAT
14	244	100.0	253	1	PRIO_GORGO
15	244	100.0	253	1	PRIO_HUMAN
16	244	100.0	253	1	PRIO_MACEA
17	244	100.0	253	1	PRIO_PONPY
18	244	100.0	253	1	PRIO_PONPY
19	244	100.0	253	2	Q6FG88
20	244	100.0	253	2	Q6JL99
21	244	100.0	253	2	AA080162
22	244	100.0	253	2	AA080162
23	244	100.0	277	2	Q6SE81
24	244	100.0	277	2	AA080162
25	244	100.0	285	2	Q6JL99
26	243	99.6	253	2	Q6FG88
27	243	99.6	253	2	Q6JL99
28	243	99.6	254	1	PRIO_MOUSE
29	243	99.6	254	1	PRIO_MOUSE
30	243	99.6	254	1	Q6JL99
31	243	99.6	254	2	AA080162

32	243	99.6	260	1	PRIO_SAISC	P40258 saimiri sci
33	242	99.2	220	2	Q666W7	Q666W7 ochotona pr
34	242	99.2	226	2	Q67907	Q67907 gazella sub
35	242	99.2	227	2	Q67909	Q67909 tragelaphus
36	242	99.2	256	1	PR2_TRAST	P40243 tragelaphus
37	242	99.2	264	1	PR1_TRAST	P40242 tragelaphus
38	241	98.8	232	1	PRIO_ATEGE	P40246 ateles geof
39	241	98.8	252	1	PRIO_CALJA	P40247 callithrix
40	240	98.4	239	1	PRIO_AOTTR	P40245 aotus trivl
41	240	98.4	240	2	Q6JL99	Q6JL99 microtus ag
42	240	98.4	248	2	Q6JL99	Q6JL99 clethrionom
43	240	98.4	254	1	PRIO_CRIGR	Q60506 cricetus
44	240	98.4	254	1	PRIO_CRIMI	Q60468 cricetus
45	240	98.4	254	1	PRIO_SIGHI	Q920C3 sigmodon hi

ALIGNMENTS

RESULT 1
PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=Prp;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@sib-sib.ch).
CC
CC EMBL: U75384; AAB50623.1; -;
CC EMBL: U75382; AAB50623.1; -;
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; Prion.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.

```

FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DIGLYP 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 53 52 0.
FT REPEAT 53 52 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E351B CRC64;

Query Match 100.0%; Score 244; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 1,5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 155 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 200

RESULT 2
PRIO_THRGE
ID PRIO_THRGE STANDARD; PRT; 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Therophilus gelada (Gelada baboon).
OC Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Cercopitheciinae; Primates; Catarrhini; Cercopithecoidea;
OC NCB1_taxonomy=9565;
(1)
RN SEQUENCE FROM N.A.
RP van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the homologous prion
RL protein gene during the period of brain expansion."
Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC modified and this statement is not removed. Usage by, and for commercial
CC or send an email to license@db-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -.
CC HSPB; P23907; IGO4.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.

```

```

FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 215 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DIGLYP 164 199 By similarity.
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT NON_TER 238 238 4.
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF60243EDB CRC64;

Query Match 100.0%; Score 244; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 1,5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 155 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 200

RESULT 3
086XR1
ID 086XR1 PRELIMINARY; PRT; 238 AA.
AC 086XR1;
DT 01-JUN-2003 (TRENBERG, 24, Created)
DT 01-JUN-2003 (TRENBERG, 24, Last sequence update)
DT 01-MAR-2004 (TRENBERG, 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCB1_taxonomy=9606;
(1)
RN SEQUENCE FROM N.A.
RP Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
CC EMBL; AY199882; AAO83635.1; -.
CC InterPro; IPR000817; Prion.
CC Pfam; PF03991; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PRP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;

Query Match 100.0%; Score 244; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 1,5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 155 SNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQNCI 200

RESULT 4
PRIO_CALMO
ID PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)

```

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Callicebus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
 OC Callitrichus
 NCBI_Taxid=9523;

RP SEQUENCE FROM N.A.
 MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

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CC -----
 CC EMBL: U08312; AAC50100.1; -;
 CC PIR: S71048; S71048.
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat; Signal.

CC KW SIGNAL.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 >241
 CC FT DISULFID 172 207
 CC FT LIPID 223 223

CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84

CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC FT NON TER 241 241
 CC SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PRIO MANSP STANDARD; PRT; 241 AA.
 ID PRIO MANSP
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).

GN Name=PRNP;
 OS Mandillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillus.

NCBI_Taxid=9561;

RP SEQUENCE FROM N.A.
 MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

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CC -----
 CC EMBL: U08303; AAC50091.1; -;
 CC PIR: S71056; S71056.
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

CC KW SIGNAL.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 >241
 CC FT DISULFID 172 207
 CC FT LIPID 223 223

CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84

CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC FT NON TER 241 241
 CC SEQUENCE 241 AA; 26398 MW; E539D84E2B2B59DE CRC64;

Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46

RESULT 5

Db 163 SNONNFVHDCVNTTIKQHTVTTTIGKSNFTETDVKKMERVVEQWCI 208

```

RESULT 6
PRIO_CERAE STANDARD; PRT; 245 AA.
ID P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Cercopithecus diana (Diana monkey)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=9534; 36224;
[1]
RN SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U08291; AAC50080.1; -
CC EMBL; U08292; AAC50081.1; -
CC PIR; S53627; S53627.
CC PIR; S71045; S71045.
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion; 5.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 222
CC PROPEP 223 245
CC LIPID 222 222
CC
CC DISULFID 171 206
CC CARBOHYD 173 173
CC CARBOHYD 189 189
CC DOMAIN 51 83
CC
CC REPEAT 51 59
CC REPEAT 60 67
CC REPEAT 68 75
CC REPEAT 76 83
CC SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

```

Query Match 100.0%; Score 244; DB 1; Length 245;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 162 SNONNFVHDCVNTTIKQHTVTTTIGKSNFTETDVKKMERVVEQWCI 207

```

RESULT 7
PRIO_CERMO STANDARD; PRT; 246 AA.
ID P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=36226;
[1]
RN SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75386; AAB50625.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion; 5.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 15
CC CHAIN 16 223
CC PROPEP 224 246
CC LIPID 223 223
CC
CC DISULFID 172 207
CC CARBOHYD 174 174
CC CARBOHYD 190 190
CC DOMAIN 44 84
CC
CC REPEAT 44 52
CC REPEAT 53 60
CC REPEAT 61 68
CC REPEAT 69 76
CC SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

```

FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 244; DB 1; Length 246;
Best local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMC1 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMC1 208

RESULT 8
PRIO_CERNE STANDARD; PRT; 246 AA.
ID PRIO_CERNE STANDARD; PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecidae;
OC NCBI_TaxID=96227;
OX NCBI_TaxID=96227;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch.
CC -----
DR EMBL; U75387; AAB50628.1; --
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT 1.

FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 244; DB 1; Length 246;
Best local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMC1 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMC1 208

RESULT 9
PRIO_CERTO STANDARD; PRT; 246 AA.
ID PRIO_CERTO STANDARD; PRT; 246 AA.
AC 095176;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus torquatus alve (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecidae;
OC NCBI_TaxID=9531;
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch.
CC -----
DR EMBL; U75385; AAB50628.1; --
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT 1.

FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 SQ SEQUENCE 246 AA; 26914 MW; P58679CBBC5ADC7 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 10
 ID PRIO_ERYPA STANDARD; PRT; 246 AA.
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (P=Prp3-35C) (Fragment).
 GN Name=PRNP;
 OS Erythrocytus patus (Red guenon) (Cercopithecus patus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Erythrocytus.
 NCBI_Taxid=9538;
 [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler Syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE), etc.
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL; U75388; AAB50627.1; -.
 CC HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion. 1.
 DR Pfam; PF00391; Prion. 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 246 Major prion protein.
 FT LIPID 223 223 Removed in mature form (By similarity).
 FT GPI-anchor amidated serine (By similarity).
 FT

FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 11
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TRENBLrel. 27, Created)
 DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
 DT 02-MAR-2004 (TRENBLrel. 27, Last annotation update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_Taxid=9606;
 [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 30981B13C8841566 CRC64;
 Query Match 100.0%; Score 244; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 12
 ID PRIO_CEBAP STANDARD; PRT; 252 AA.
 AC P40249;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (P=Prp3-35C).
 GN Name=PRNP;
 OS Cebus apella (Brown-capped capuchin).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
 NCBI_Taxid=9515;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RX Schatzl H.M., Dacosca M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).


```

CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: U08297; AAC50084.1; -.
CC PIR: S53631; S53631.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 229
CC PROPEP 230 252
CC LIPID 229 229
CC -----
CC DISUPID 178 213
CC CARBOHYD 180 186
CC CARBOHYD 196 196
CC DOMAIN 51 90
CC -----
CC REPEAT 51 58
CC REPEAT 59 66
CC REPEAT 67 74
CC REPEAT 75 82
CC REPEAT 83 90
CC SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;
CC -----
Qy 1 SNQNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVEQWCI 46
Db 169 SNQNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVEQWCI 214
CC -----

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RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374 (1995).
RN (2)
RP SEQUENCE OF 8-253 FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudaert J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: U08297; AAC50084.1; -.
CC EMBL: U75389; AAB50624.1; -.
CC PIR: S53618; S53618.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 229
CC PROPEP 231 253
CC LIPID 230 230
CC -----
CC DISUPID 179 214
CC CARBOHYD 181 181
CC CARBOHYD 197 197
CC DOMAIN 51 91
CC -----
CC REPEAT 51 59
CC REPEAT 60 67
CC REPEAT 68 75
CC REPEAT 76 83
CC REPEAT 84 91
CC SEQUENCE 253 AA; 27626 MW; 14BL7477881F5316 CRC64;
CC -----
Qy 1 SNQNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVEQWCI 46
Db 170 SNQNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVEQWCI 215
CC -----

```

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name:Prp;
 OS Gorilla gorilla gorilla (Lowland gorilla).
 OC Eukaryota; Chordata; Craniata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homidae; Gorilla.
 RN (1) Taxid:9555;
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 RN (2)
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95083661; PubMed=7991600;
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;
 RT "Infectious amyloid precursor gene sequences in primates used for
 RT experimental transmissible prion proteinopathies.";
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurodegenerative diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL, U08300; AAC50089.1; -;
 DR EMBL, U15166; AAA68633.1; -;
 DR PIR, I37032; I37032.
 DR PIR, S53614; S53614.
 DR HSRP, P04156; I14M.
 DR InterPro, IPR000817; Prion.
 DR Pfam, PF00377; Prion, 1.
 DR PRINTS, PR00341; Prion, 1.
 DR PROSITE, PS00291; Prion_1; 1.
 DR PROSITE, PS00706; Prion_2; 1.
 KW Glycoprotein, GPI-anchor, Lipoprotein, Prion, Repeat, Signal.
 FT CHAIN 1 22
 FT PROPEP 23 230
 FT LIPID 230 230
 FT DISULFID 179 214
 FT CARBOHYD 181 181
 FT CARBOHYD 197 197
 FT DOMAIN 51 91
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 FT REPEAT 84 91
 FT REPEAT 91 91
 FT CONFLICT 84 91
 FT SEQUENCE 253 AA; 27660 MW; E28F4C3FA8CA43E CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1,6e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONFVHDCVNTTIKQHTVTTTKENFTETDVKKMEVWQKCI 46
 Db 170 SNONFVHDCVNTTIKQHTVTTTKENFTETDVKKMEVWQKCI 215
 RESULT 15
 ID PRIO_HUMAN STANDARD; PRT; 253 AA.
 AC P04156; O60489; P78446; Q15216; Q15221; Q8TBG0; Q96E70; Q9UP19;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-NOV-1986 (Rel. 03, Last sequence update)
 DT 01-OCT-2004 (Rel. 45, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (ASCR)
 DE (CD230 antigen).
 GN Name:Prp;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.
 RN (1) Taxid:9606;
 RP SEQUENCE FROM N.A.
 RA MEDLINE=86300093; PubMed=3755672;
 RA Kretzschmar H.A., Stowring L.E., Westaway D., Stubblebine W.H.,
 RA Prusiner S.B., Dearmond S.J.;
 RT "Molecular cloning of a human prion protein cDNA.";
 RL DNA 5:315-324(1986).
 RN (2)
 RP SEQUENCE FROM N.A., AND VARIANT 56-GLY--GLY-63 DEL.
 RC TISSUE=Brain;
 RX MEDLINE=91326137; PubMed=1678248;
 RA Puckett C., Concannon P., Casey C., Hood L.;
 RT "Genomic structure of the human prion protein gene.";
 RL Am. J. Hum. Genet. 49:320-329(1991).
 RN (3)
 RP SEQUENCE FROM N.A.
 RA MEDLINE=99018115; PubMed=9799790;
 RA Lee I.Y., Westaway D., Smt A.F.A., Wang K., Seto J., Chen L.,
 RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 RT region from three mammalian species.";
 RL Genome Res. 8:1022-1037(1998).
 RN (4)
 RP SEQUENCE FROM N.A.
 RC TISSUE=Prostate;
 RA Hryb D.J., Reynolds T.A., Nakha A.M., Kahn S.M., Khan S.M.,
 RA Romas N.A., Roemer W.;
 RT "Cloning of human prostate prion protein cDNA.";
 RL Submitted (SEP-2000) to the EMBL/GenBank/DBJ databases.
 RN (5)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21638749; PubMed=11780052; DOI=10.1038/444865a;
 RA Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,
 RA Jones M., Scavrides G., Almeida J.P., Babbage A.K., Bagnall C.L.,
 RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
 RA Beasley O.P., Bird C.P., Blake S.E., Bridgman A.M., Brown A.J.,
 RA Buck D., Buzril W.D., Butler A.P., Carder C., Carter N.P.,
 RA Chapman J.C., Clamp M., Clark A.P., Clark L.N., Clark S.Y., Clee C.M.,
 RA Clegg S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
 RA Coulson A., Coville G.O., Deadman R., Dhami P.D., Dunn M.,
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
 RA Grahame D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
 RA Huckle E., Hunt A.R., Hunt S.E., Jefferies K., Johnson C.W., Johnson D.,
 RA Kay M.P., Kimberley A.M., King A., Knight A., Laith G.K., Lawlor S.,
 RA Leharshel M.H., Leverhwa M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
 RA Marsh V.L., Martin S.L., McCormack L.J., McEly C., McMuray A.A.,
 RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
 RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
 RA Phillimore B.J.C.T., Prchalingsam S.R., Plumb R.W., Ramsey H.,
 RA Rice C.M., Rose M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,

RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
RA Swann R.M., Symamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
RA Tracey A., Tromans A.C., Vaudin M., Walli J.M., Wallis J.M.,
RA Whitehead S.L., Whiteaker P., Willey D.L., Williams L., Williams S.A.,
RA Wilmshurst L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RT Rogers J.,
RT "The DNA sequence and comparative analysis of human chromosome 20.",
RL Nature 414:865-871(2001).
[16]
RN SEQUENCE FROM N.A.
RP TISSUE=Brain, AND Ovary;
RX MEDLINE=22386257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Reinhold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max I., Wang J., Hsieh F.,
RA Datchenko L., Marsina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshiyuki S., Cantinici P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McKernan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Rahney J., Helton E., Ketterman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
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RT and mouse cDNA sequences.",
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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RN SEQUENCE OF 8-253 FROM N.A.
RX MEDLINE=86261778; PubMed=3014653;
RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.,
RT "Human prion protein cDNA: molecular cloning, chromosomal mapping, and
RT biological implications.",
RL Science 233:364-367(1986).
[18]
RN SEQUENCE OF 9-232 FROM N.A., AND VARIANT 56-GLY--GLY-63 DEL.
RP TISSUE=Brain;
RX MEDLINE=93250789; PubMed=1363802;
RA Dietrich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,
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[19]
RN SEQUENCE OF 41-85 FROM N.A., AND VARIANT 56-GLY--GLY-63 DEL.
RX MEDLINE=96090306; PubMed=7485229;
RA Perry R.T., Go R.C., Harrell L.E., Acton R.T.,
RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)
RT detects two different 24 bp deletions in an atypical Alzheimer's
RT disease family.",
RL Am. J. Med. Genet. 60:12-18(1995).
[10]
RN SEQUENCE OF 58-85 AND 111-150.
RX MEDLINE=91160504; PubMed=1672107;
RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,
RA Prineas S.B., Farlow M.R., Ghetti B., Frangione B.,
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RT kindred) is an 11 kd fragment of prion protein with an N-terminal
RT glycine at codon 58.",
RL EMBO J. 10:513-519(1991).
[11]
RN SEQUENCE OF 84-91 FROM N.A.
RX MEDLINE=92073400; PubMed=1683708;
RA Goldfarb L.G., Brown P., McCombie W.R., Goldgaber D., Swergold G.D.,
RA Wille P.R., Cervenkova L., Baron H., Gibbs C.J., Jr., Gajdusek D.C.,
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RT five, seven, and eight extra octapeptide coding repeats in the PRNP
RT gene.",
RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).

RN [12]
RP STRUCTURE BY NMR OF 23-230.
RX MEDLINE=20087216; PubMed=10618385;
RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
RA Lopez Garcia F., Billeter M., Calzolari L., Wider G., Wuthrich K.,
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RN STRUCTURE BY NMR OF 118-221.
RX MEDLINE=20359708; PubMed=10900000;
RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
RA Zahn R., Wuthrich K.,
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RT protein.",
RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
[14]
RN REVIEW ON VARIANTS.
RX MEDLINE=93372867; PubMed=8364585;
RA Palmer M.S., Collinge J.,
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[15]
RN REVIEW ON VARIANTS.
RX MEDLINE=94029646; PubMed=8105771;
RA Prusiner S.B.,
RT "Genetic and infectious prion diseases.",
RL Arch. Neurol. 50:1129-1153(1993).
[16]
RN VARIANT GSD LEU-102.
RX MEDLINE=89159432; PubMed=2564168;
RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
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RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
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RL Nature 338:342-345(1989).
[17]
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RX MEDLINE=89392018; PubMed=2781132;
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RL Biochem. Biophys. Res. Commun. 163:974-979(1989).
[18]
RN VARIANT PFI ASN-178.
RX MEDLINE=92195483; PubMed=1347910;
RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,
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RT protein gene at codon 178.",
RL Neurology 42:669-670(1992).
[19]
RN VARIANT CJD ASN-178.
RX MEDLINE=91124933; PubMed=1671440;
RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanen J.,
RA McCombie W.R., Trapp S., Gajdusek D.C.,
RT "New mutation in scrapie amyloid precursor gene (at codon 178) in
RT Finnish Creutzfeldt-Jakob kindred.",
RL Lancet 337:425-425(1991).
[20]
RN VARIANT CJD LYS-200.
RX MEDLINE=90355709; PubMed=1975028;
RA Goldfarb L., Miltova E., Brown P., Toh B.K., Gajdusek D.C.,
RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters

Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,6e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKOHTVTTTTKGNFETDYKMERVVEQWCI 46
DB 170 SNQNNFVHDCVNITIKOHTVTTTTKGNFETDYKMERVVEQWCI 215

Fri Dec 3 10:53:51 2004

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Page 10

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(without alignments)
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Title: US-10-031-975-12_COPY_176_221

Perfect score: 244
Sequence: 1 SNQNNFVHDCVNTIKQHTV.....ENFTEDVKMERVVEQNCI 46

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Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	142	1	US-08-556-823-10
2	244	100.0	245	4	US-09-431-887-5
3	244	100.0	245	4	US-09-431-887-15
4	244	100.0	252	4	US-09-431-887-17
5	244	100.0	253	1	US-08-242-188-2
6	244	100.0	253	1	US-08-509-261A-2
7	244	100.0	253	1	US-08-660-626-8
8	244	100.0	253	1	US-08-692-852-2
9	244	100.0	253	2	US-08-713-939A-2
10	244	100.0	253	2	US-08-868-162A-22
11	244	100.0	253	3	US-09-031-168-8
12	244	100.0	253	3	US-09-128-450-20
13	244	100.0	253	3	US-09-036-579-2
14	244	100.0	253	3	US-09-823-494-20
15	244	100.0	253	3	US-09-550-374-2
16	244	100.0	253	4	US-09-431-887-1
17	244	100.0	253	4	US-09-431-887-3
18	244	100.0	253	4	US-09-431-887-4
19	244	100.0	253	4	US-09-431-887-7
20	244	100.0	253	4	US-09-431-887-9
21	244	100.0	253	4	US-09-431-887-10
22	244	100.0	253	4	US-09-431-887-11
23	244	100.0	253	4	US-09-431-887-12
24	244	100.0	253	4	US-09-431-887-14
25	244	100.0	253	4	US-09-431-887-15
26	244	100.0	253	4	US-09-431-887-18
27	244	100.0	253	4	US-09-943-906-2

28	244	100.0	253	4	US-09-669-516C-8	Sequence 8, Appl
29	244	100.0	253	4	US-09-919-172-57	Sequence 57, Appl
30	244	100.0	253	4	US-09-976-594-72	Sequence 72, Appl
31	244	100.0	253	4	US-09-904-987-3	Sequence 3, Appl
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33	243	99.6	254	1	US-08-509-261A-1	Sequence 1, Appl
34	243	99.6	254	1	US-08-660-626-7	Sequence 1, Appl
35	243	99.6	254	1	US-08-692-892-1	Sequence 1, Appl
36	243	99.6	254	2	US-08-713-939A-1	Sequence 1, Appl
37	243	99.6	254	2	US-08-868-162A-21	Sequence 21, Appl
38	243	99.6	254	3	US-09-031-168-7	Sequence 7, Appl
39	243	99.6	254	3	US-09-128-450-19	Sequence 19, Appl
40	243	99.6	254	3	US-09-128-450-28	Sequence 28, Appl
41	243	99.6	254	3	US-09-036-579-1	Sequence 1, Appl
42	243	99.6	254	3	US-09-823-494-19	Sequence 19, Appl
43	243	99.6	254	3	US-09-823-494-28	Sequence 28, Appl
44	243	99.6	254	3	US-09-550-374-1	Sequence 1, Appl
45	243	99.6	254	4	US-09-431-887-20	Sequence 20, Appl

ALIGNMENTS

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RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10
; Query Match 100.0%; Score 244; DB 1; Length 142;
; Best Local Similarity 100.0%; Pred. No. 6,1e-26;
; Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQNCI 46
Db 81 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQNCI 126
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RESULT 2

US-09-431-887-5
Sequence 5, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 5
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 3

US-09-431-887-15
Sequence 15, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 15
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 4

US-09-431-887-17
Sequence 17, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04

NUMBER OF SEQ ID NOS: 37

SOFTWARE: Patent In Ver. 2.0

SEQ ID NO 17

LENGTH: 252

TYPE: PRT

ORGANISM: Cebus sp.

US-09-431-887-17

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 252;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 169 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 214

RESULT 5

US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Karl Bosicovic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicovic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match

Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 6

US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 SNONNFVHDCVNTIKQHTVTTTGGNFTEIDVGMERVVEQWCI 46
Db 170 SNONNFVHDCVNTIKQHTVTTTGGNFTEIDVGMERVVEQWCI 215
RESULT 7
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Aacili
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 170 SNONNFVHDCVNTIKQHTVTTTGGNFTEIDVGMERVVEQWCI 215
RESULT 8
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 215

RESULT 9

US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713, 939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 215

RESULT 10

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962569

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868, 162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:

INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETEDVKKMERVVEQNCI 215

RESULT 11

US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 12
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Cheesbro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 13
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 14
US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 635610
GENERAL INFORMATION:
APPLICANT: Cheesbro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO: 20
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match 100.0%; Score 244; DB 3; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKMERVVEQWCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKMERVVEQWCI 215

RESULT 15

US-09-550-374-2
 Sequence 2, Application US/09550374
 Patent No. 6372214

GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Williamson, R. Anthony
 APPLICANT: Burton, Dennis R.
 TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
 NUMBER OF SEQUENCES: 86
 CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.
 STREET: 2200 Sand Hill Road
 CITY: Menlo Park
 STATE: CA
 COUNTRY: U.S.A.
 ZIP: 94025

COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/550,374
 FILING DATE:

CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/036,579
 FILING DATE:

ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/059001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-854-5277
 TELEFAX: 415-854-0875

TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-09-550-374-2

Query Match 100.0%; Score 244; DB 3; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKMERVVEQWCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKMERVVEQWCI 215

Search completed: December 3, 2004, 00:18:56
 Job time: 17.4197 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

Perfect score: 244
Sequence: 1 SNONFVHDCVITIKQHTV.....ENFTEDVKMERVVEQKCI 46

Scoring table: BLASTSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seque, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

1:	/cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2:	/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3:	/cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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19:	/cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20:	/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	244	100.0	117	14	US-10-050-902-348
2	244	100.0	117	14	US-10-050-902-348
3	244	100.0	117	14	US-10-050-902-348
4	244	100.0	117	14	US-10-050-902-348
5	244	100.0	117	14	US-10-050-902-348
6	244	100.0	117	14	US-10-050-902-348
7	244	100.0	117	14	US-10-050-902-348
8	244	100.0	117	14	US-10-050-902-348
9	244	100.0	117	14	US-10-050-902-348
10	244	100.0	117	14	US-10-050-902-348
11	244	100.0	117	14	US-10-050-902-348
12	244	100.0	117	14	US-10-050-902-348
13	244	100.0	117	14	US-10-050-902-348

ALIGNMENTS

14	244	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
15	244	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
16	244	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
17	244	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
18	244	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
19	244	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
20	244	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
21	244	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
22	244	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
23	244	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
24	244	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
25	244	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
26	244	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
27	244	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
28	244	100.0	253	14	US-10-304-630-21	Sequence 21, Appl1
29	244	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
30	244	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
31	244	100.0	253	14	US-10-301-488A-8	Sequence 8, Appl1
32	244	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1
33	244	100.0	253	14	US-10-435-602-2	Sequence 2, Appl1
34	244	100.0	253	15	US-10-301-448-21	Sequence 21, Appl1
35	244	100.0	253	15	US-10-301-448-22	Sequence 22, Appl1
36	244	100.0	253	15	US-10-301-448-32	Sequence 32, Appl1
37	244	100.0	253	16	US-10-648-593-151	Sequence 151, Appl1
38	244	100.0	253	16	US-10-470-848-2	Sequence 2, Appl1
39	244	100.0	253	16	US-10-772-656-54	Sequence 54, Appl1
40	244	100.0	252	17	US-10-745-393-3	Sequence 324, Appl1
41	243	99.6	124	14	US-10-050-902-324	Sequence 324, Appl1
42	243	99.6	124	14	US-10-050-898-324	Sequence 93, Appl1
43	243	99.6	124	14	US-10-346-190-93	Sequence 12, Appl1
44	243	99.6	164	9	US-09-745-003-12	Sequence 6, Appl1
45	243	99.6	209	16	US-10-470-848-6	

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesch, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 46
Db 49 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 94

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Piossek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match Best Local Similarity 100.0%; Score 244; DB 14; Length 117;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 46
Db 49 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 94

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Peilicholi, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match Best Local Similarity 100.0%; Score 244; DB 14; Length 117;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 46
Db 49 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 94

RESULT 4

US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lubers, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUB-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match Best Local Similarity 100.0%; Score 244; DB 16; Length 141;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 46
Db 81 SNQNNFVHDCVNITIKQHTVTTTGGNFTETDVKKMERVVEQMC1 126

RESULT 5

US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: FRP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match Best Local Similarity 100.0%; Score 244; DB 9; Length 162;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 79 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 124

RESULT 6
US-10-104-047-2013
; Sequence 2013, Application US/10104047
; Publication No. US20030236392A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20030236392A1 full length cDNA
; FILE REFERENCE: H1-A0105
; CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2013
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 244; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 80 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 125

RESULT 7
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 244; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 140 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 185

RESULT 8
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848

; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 244; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 193

RESULT 9
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Faatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; TITLE OF INVENTION: chaperone, and method for producing and using them
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 01115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 244; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 193

RESULT 10
US-10-304-630-5
; Sequence 5, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 5
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus aethiops
US-10-304-630-5

Query Match 100.0%; Score 244; DB 14; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
Db 162 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 207

RESULT 11
US-10-304-630-15
Sequence 15, Application US/10304630
Publication No. US20030161836A1
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/10/304,630
PRIOR FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 15
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus diana
US-10-304-630-15

Query Match 100.0%; Score 244; DB 14; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
Db 162 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 207

RESULT 12
US-10-304-630-17
Sequence 17, Application US/10304630
Publication No. US20030161836A1
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/10/304,630
PRIOR FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 17
LENGTH: 252
TYPE: PRT
ORGANISM: Cebus sp.
US-10-304-630-17

Query Match 100.0%; Score 244; DB 14; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
Db 169 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 214

RESULT 13
US-09-823-494-20
Sequence 20, Application US/09823494
Publication No. US20010041790A1
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Priola, Suelette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
Db 170 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 215

RESULT 14
US-09-904-987-3
Sequence 3, Application US/09904987
Patent No. US20020037908A1
GENERAL INFORMATION:
APPLICANT: No. US20020037908A1, Inc.
TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepathic
FILE REFERENCE: 42108/26146
CURRENT APPLICATION NUMBER: US/09/904,987
PRIOR FILING DATE: 2001-07-12
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.0
SEQ ID NO 3
LENGTH: 253
TYPE: PRT
ORGANISM: homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567
DATABASE ENTRY DATE: 2001-04-17
RELEVANT RESIDUES: (1)..(253)
US-09-904-987-3

Query Match 100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 46
Db 170 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCI 215

RESULT 15
US-09-919-172-57

US-09-919-172-57
; Sequence 57, Application US/09919172
; Patent No. US20020119463A1

GENERAL INFORMATION:

APPLICANT: Faris, M

APPLICANT: Turner,
TITLE OF INVENTION:

FILE REFERENCE: PA-003

FILE REFERENCE: PA-0038 US
CURRENT APPLICATION NUMBER: US/09/919,172

CURRENT FILING DATE: 2001-07-30

PRIOR APPLICATION NUMBER: 60/222,469

PRIOR FILING DATE: 2000-07-28

NUMBER OF SEQ ID NOS: 102

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; SOFTWARE: PERL Program
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; SEQ ID NO 57
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; LENGTH: 253

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; LENGTH: 253
; TYPE: PRT

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ORGANISM: *Homo sapiens*

FEATURE:

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NAME/KEY: misc_feature
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OTHER INFORMATION: INC

US-09-919-172-57

Course: Math

Query Match	Best Local Similarity
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92	0.99
93	0.99
94	0.99
95	0.99
96	0.99
97	0.99
98	0.99
99	0.99
100	0.99

Best Local Similarity
Matches 46: Conservative

Malchies 46; Counsel Val

QY 1 SNQNNFVHDCVN

Db 170 SNQNNFVHDCVN

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Search completed: December
Job time : 55.4459 sec

JOB TIME : 55.4459 SECS

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFDHDCVNIITKQHTVTITKGENFTETDKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:.*
1: geneseqp1960s:.*
2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mpr
5	193	100.0	124	5	ABG80652 Mouse tru
6	193	100.0	124	7	ADD24200 mpr-pr-EK
7	193	100.0	142	2	AAW17686 Priton pro
8	193	100.0	163	7	ADB63859 Human pri
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	AAW07316 Mouse pri
11	193	100.0	208	3	AAW07318 Human pri
12	193	100.0	208	3	AAW07327 Mouse pri
13	193	100.0	208	3	AAW07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-t
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	4	ABG31905 HCV type
18	193	100.0	211	4	AAW30801 Amino aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Monkey pr
21	193	100.0	245	4	AAW72342 Cercopit
22	193	100.0	245	4	AAW72352 Cercopit
23	193	100.0	253	2	AAW86715 Human pri
24	193	100.0	253	2	AAW69660 Human pri
25	193	100.0	253	2	AAW85901 Human pri

ALIGNMENTS

26	193	100.0	253	2	AAW07994 Human pri
27	193	100.0	253	3	AAW81485 Human pri
28	193	100.0	253	3	AAW06272 Human pri
29	193	100.0	253	3	AAW15035 Human pri
30	193	100.0	253	4	AAW72339 Chimpanze
31	193	100.0	253	4	AAW72347 Priton pro
32	193	100.0	253	4	AAW72353 Guezeza p
33	193	100.0	253	4	AAW72344 Rhesus mo
34	193	100.0	253	4	AAW72345 Gibbon pr
35	193	100.0	253	4	AAW72350 Marmoset
36	193	100.0	253	4	AAW72351 Hamadryas
37	193	100.0	253	4	AAW72348 Priton pro
38	193	100.0	253	4	AAW72356 Stiamang p
39	193	100.0	253	4	AAW72346 Priton pro
40	193	100.0	253	4	AAW72355 Priton pro
41	193	100.0	253	4	AAW72349 Priton pro
42	193	100.0	253	4	AAW72340 Orangutan
43	193	100.0	253	4	AAW72338 Human pri
44	193	100.0	253	4	AAW72354 Capuchin
45	193	100.0	253	4	AAW72341 Gorilla p

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytototoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN W0200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisost A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organiser comprising
XX at least one first attachment site, where the organiser is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, anti-allergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 SQ Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMR 36
 DB 52 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMR 87

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 AC
 XX ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 DE

Human prion protein/cysteine-containing peptide fusion protein.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mulein;
 KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Homo sapiens.
 OS Synthetic.
 PN WO200256907-A2.
 PD
 XX 25-JUL-2002.
 PD
 XX 21-JAN-2002; 2002WO-IB000168.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUEC) LUECEND R.
 PA (STAV) STAUENBIEL M.
 PA (FREY) FREY P.
 XX

PI Maurer P, Lechner F, Ortman R, Luecend R, Stauenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisbet A, Sebbel P, Ploesek C;
 XX WPI; 2002-636514/68.
 DR

XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold through at least one non-peptide bond to the first attachment site and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX

SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMR 36
 DB 52 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMR 87

RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC
 XX ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 DE

Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mulein.
 XX

OS Synthetic.
 OS prion.
 XX
 XX WO2003059386-A2.
 PN

PI

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 XX 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 XX WPI; 2003-598483/56.
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SO Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGGNFETDVKKMR 36
 DB 52 NNFVHDCVNTTKQHTVTTTGGNFETDVKKMR 87
 RESULT 4
 ID AEG94340 standard; protein; 124 AA.
 AC AEG94340;
 XX
 XX 10-DEC-2002 (first entry)
 DT
 XX
 DE Mouse mPrpC protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytotoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 XX
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 XX WPI; 2002-627351/67.
 DR
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX
 XX Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capid which comprises mutant Q β eta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytotoxic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SO Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGGNFETDVKKMR 36
 DB 53 NNFVHDCVNTTKQHTVTTTGGNFETDVKKMR 88
 RESULT 5
 ID AEG80652 standard; protein; 124 AA.
 AC AEG80652;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β eta 1-42; influenza; mutant;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angiotensinoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 OS Synthetic.
 OS
 XX

BN MO200256907-A2.
 XX 25-JUL-2002.
 XX 21-JAN-2002; 2002MO-IB000168.
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX Maurer P, Lechner F, Ortman R, Lueoend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisot A, Sebbel P, Ploesek C;
 XX WPI; 2002-636514/68.
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX Example 7, Page 415; 418pp; English.
 XX The invention relates to a composition comprising: (a) a non-natural
 XX molecular scaffold comprising: (1) a core particle selected from: (1) a
 XX core particle of a non-natural origin; and (2) a core particle of natural
 XX origin; and (1) an antigen or antigenic determinant with at least
 XX one covalent bond, (b) an antigen or antigenic determinant with at least
 XX one second attachment site, where the antigen or antigenic determinant is
 XX amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 XX attachment site is selected from: (1) an attachment site not naturally
 XX occurring with the antigen or antigenic determinant; and (1) an
 XX attachment site naturally occurring with the antigen or antigenic
 XX determinant, where the second attachment site is capable of association
 XX through at least one non-peptide bond to the scaffold; and
 XX where the antigen or antigenic determinant and the first attachment interact
 XX through the association to form an ordered and repetitive antigen array.
 XX Also included is a process for producing a non-naturally occurring
 XX ordered and repetitive antigen array. The composition is used in
 XX immunisation and as a vaccine for diseases such as influenza, graft
 XX versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 XX respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 XX acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 XX systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 XX gravis, immunoproliferative disease lymphadenopathy,
 XX angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 XX rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 XX osteoporosis and infectious diseases. The present sequence is modified to
 XX antigen for use in the array of the invention. The antigen is modified to
 XX possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 XX containing N- or C-terminal linker peptide which serves as the attachment
 XX point to a virus like particle or bacterial protein (the scaffold
 XX protein).
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 XX ADD24200;
 XX 15-JAN-2004 (first entry)
 XX mPrP-EK-Fc* cleaved protein sequence.
 DE
 XX vaccine composition; virus-like particle; core particle;
 XX first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 XX unidentified.
 OS
 OS prion.
 XX
 XX MO2003059386-A2.
 XX 24-JUL-2003.
 XX 17-JAN-2003; 2003MO-EP000460.
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX Example 13; SEQ ID NO 93; 246pp; English.
 PS
 XX This invention relates to a novel vaccine composition comprising a virus-
 XX like or a core particle with at least one first attachment site and at
 XX least one antigen or antigenic determinant that is a prion protein (PrP)
 XX or its dimer, or a PrP peptide, the antigen or antigenic determinant
 XX being bound to the virus-like or core particle. The vaccine of the
 XX invention may have neuroprotective or anti-inflammatory activity. The
 XX composition is useful as a medicament or in manufacturing a medicament
 XX for the treatment or prevention of prion diseases. The prion diseases may
 XX include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 XX Disease. The present sequence is the amino acid sequence of the cleaved
 XX protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 XX which was used during the exemplification of the invention.
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 NNFVHDCVNITTKOHTVTTTGTGKGFETDVMOMER 36
 Db 53 NNFVHDCVNITTKOHTVTTTGTGKGFETDVMOMER 88
 RESULT 7
 AAAM17686
 ID AAAM17686 standard; peptide; 142 AA.
 XX
 XX AAAM17686;
 XX

DT 14-JUN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX Creutzfeldt-Jacob disease; kuru; GSS; FFI; fatal familial insomnia;
 KW Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX Homo sapiens.
 XX WO9716728-A1.
 PN 09-MAY-1997.
 PD 28-OCT-1996; 96WO-US017462.
 PF 02-NOV-1995; 95US-00556823.
 PR (REGC) UNIV CALIFORNIA.
 PA Prusiner SB, Kaneko K, Cohen FE;
 PI WPI; 1997-272248/24.
 DR Prion proteins (PrPs) having at least one alpha-helical domain - used in
 XX assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS Claim 11; Page 7-38; 50pp; English.
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC C). Methods, for screening compounds which inhibit the binding of PrP-C
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jacob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
 DB 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 119
 RESULT 8
 ADB63859 standard; protein; 163 AA.
 ID ADB63859;
 AC ADB63859;
 DT 04-DEC-2003 (first entry)
 XX Human protein encoded by clone ASTRO20055570.
 DE Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KW cell regeneration; membrane protein; signal transduction-related protein;
 KW transcription-related protein; osteoporosis; neurological disease;
 KW cancer; tumour.
 XX Homo sapiens.
 OS EP1308459-A2.
 PN 07-MAY-2003.
 PD 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 DR New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS Claim 1; Page; 222pp; English.
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, and as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX Sequence 163 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
 DB 83 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 118
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 AC ABG31907;
 DT 05-NOV-2002 (first entry)
 XX Human prion protein related peptide #6.
 DE Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX Homo sapiens.
 OS WO200261418-A1.
 PN 08-AUG-2002.
 PD

XX 31-JAN-2002; 2002WO-JP000803.
 XX 31-JAN-2001; 2001JP-00024279.
 XX (TOHO) UNIV TOHOKU.
 PA Kitamoto T, Miyoshi K, Mohri S;
 XX WPI; 2002-619277/66.
 DR
 XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX Example 2; Page 63-64; 69pp; Japanese.
 XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (PDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 CC
 SQ Sequence 200 AA;
 Query Match 100.0%; Score 193; DB 5; Length 200;
 Best Local Similarity 100.0%; Pred. No. 1.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 36
 DB 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 178
 RESULT 10
 AAB07316
 ID AAB07316 standard; protein; 208 AA.
 AC
 XX AAB07316;
 DT 17-OCT-2000 (first entry)
 XX
 DB Mouse prion protein sequence.
 XX
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 XX (BBSR-) BBSRC OFFICE.
 PA

XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-387880/33.
 DR
 XX Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX
 PT Disclosure; Page 41-42; 50pp; English.
 XX
 CC The present sequence is the mouse prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 36
 DB 150 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 185
 RESULT 11
 AAB07318
 ID AAB07318 standard; protein; 208 AA.
 AC
 XX AAB07318;
 DT 17-OCT-2000 (first entry)
 XX
 DB Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 XX (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX WPI; 2000-387880/33.
 DR
 XX Novel immunoassay for prion protein, used for the determination of

PT transmissible spongiform encephalopathies in bovines.
 XX Disclosure; Page 43-44; 50pp; English.
 PS
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
 DB 151 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 186
 RESULT 12
 AAB07327
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 DT 17-OCT-2000 (first entry)
 DE Mouse prion protein sequence.
 XX
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; Prp.
 XX
 OS Mus sp.
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 PD 25-MAY-2000.
 XX
 XX 27-OCT-1999; 99WO-FI000896.
 XX
 XX 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (Prp) sequence.

CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
 DB 150 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 185
 RESULT 13
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 DT 17-OCT-2000 (first entry)
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; Prp.
 XX
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 PD 25-MAY-2000.
 XX
 XX 27-OCT-1999; 99WO-FI000896.
 XX
 XX 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AA07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 36
 DB 151 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 186

RESULT 14

ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KW Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

PI Kitamoto T, Miyoshi K, Mohri S;

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

CC Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 36
 DB 151 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 186

RESULT 15
 ABG31904 standard; protein; 208 AA.
 ID ABG31904 standard; protein; 208 AA.
 XX
 AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KW Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

PI Kitamoto T, Miyoshi K, Mohri S;

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention

CC Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 36
 DB 151 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 186

Search completed: December 3, 2004, 00:55:38
 Job time : 59.6066 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITTKQHTVTTTGGNFETEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	* Query Match	Length	DB ID	Description
1	193	100.0	226	2 A53892	p10n-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 U7HU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 S71043	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53615	major prion protei
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	prion protein - go
25	193	100.0	254	2 A24759	prion protein - ch
26	193	100.0	254	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S37137	prion protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 U7HYH	major prion Pr-Sc
32	188	97.4	256	2 JH0268	major prion protei
33	188	97.4	257	2 A23545	major prion PrP27-
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	prion protein - go
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 J01900	major prion protei
38	182	94.3	252	2 J06175	prion protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-tRNA
42	53	27.5	267	1 U7CH	major prion protei
43	53	27.5	267	2 A37372	prion protein homo
44	53	27.5	273	2 A46280	prion protein - ch
45	53	27.5	346	2 B71496	cryptophan-tRNA 11

ALIGNMENTS

RESULT 1

A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:laao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match 100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 46-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTGGNFETEDVKMER 36
DB 145 NNFVHDCVNITTKQHTVTTTGGNFETEDVKMER 180

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71041; S53630
R:Schatz, H.M.
submitted to the EMBL data library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437.
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-231 <SCH>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
DB 157 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 192

RESULT 3

S71048

major prion protein - Calliebus moloch (fragment)
C/Species: Calliebus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Accession: S71048; S53632
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203; 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
DB 166 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Accession: S71056; S53621
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203; 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
DB 166 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201

DB 166 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201

RESULT 5

S53627

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Accession: S53627; S71043
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995

A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291

R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA

A/Residues: 1-10; 'V', 12-202; 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
DB 165 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 200

RESULT 6

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Accession: S71045; S53628
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G47434

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 8-10; 'U', 12-202; 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
DB 165 NNFFVHDCVNITIKOHTVTTTGGKGFETDVKMER 200

RESULT 7

S53634


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major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53634
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71047
A:Reference number: S71041
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4,5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 36
    |||
Db 172 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 207

RESULT 8
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53631
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71041
A:Reference number: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4,5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 36
    |||
Db 172 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 207

RESULT 9
major prion protein precursor - human
N:Alternate names: 11k amyloid protein; 27-30K sialoglycoprotein; PrP 27-30; PrP 33-35C;
C:Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A44173; A40372; A05011; S14078; I54322; I68597; I58135; I58184; I79633; I797

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A:Kretschmar, A.; Storting, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A>Title: Molecular cloning of a human prion protein cDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <RRE>
A:CROSS-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A>Title: Genomic structure of the human prion protein gene.
A:Reference number: A40372; MUID:91328137; PMID:1678248
A:Accession: A40372
A>Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80, 89-253 <PUC>
A:CROSS-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A>Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not b
R:Lião, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017
A:Molecule type: mRNA
A:Residues: 8-117, 119-253 <LIA>
A:CROSS-references: GB:PD00015; NID:g220015; PIDN:BAAO0011.1; PID:g220016; GB:M13667; NID
R:Tagliviñi, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A>Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: Protein
A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
R:Dieckrich, J.F.; Knopman, D.S.; Last, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83, 92-240 <RES>
A:CROSS-references: GB:M61929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RE3>
A:CROSS-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.; I
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: I58135; MUID:92140671; PMID:1736177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91, 'PHGGGGMQPHGGGMQPHGGGMQPHGGGMQPHGGGMQPHGGG' <RE2>
A:CROSS-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699
R:Goldfisch, L.G.; Brown, P.; McComb, W.R.; Goldfisch, D.; Swergold, G.D.; Wille, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 89, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, an
A:Reference number: I59184; MUID:92073400; PMID:1683708
A:Accession: I59184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOI>
A:CROSS-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRIP
A:CROSS-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl-

F1:22/Domain: signal sequence #status predicted <SIG>
F1:23-230/Product: major prion protein #status predicted <MAT>
F1:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F1:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F1:179-214/Distal: bonds: #status predicted
F1:191,197/Binding site: carboxylate (Asn) (covalent) #status predicted
F1:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 208

RESULT 10

S53624

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08311

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS009.1; PID:9475584

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 208

RESULT 11

S53623

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08298

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 208

RESULT 12

S53620

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08294

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 36
Db 173 NNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMER 208

RESULT 13

S53625

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08301

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 |||
 DB 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I84423; S53622; S71054

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 135907; PMID:95083661; PMID:7991600

A:Accession: I84423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U5163; NID:G595850; PID:AAA68635.1; PID:G5958

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:9519066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:G474372; PID:AA50095.1; PID:G474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 |||
 DB 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PID:AA50094.1; PID:G4743

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:9519066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCW>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 |||
 DB 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 208

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U5163; NID:G595850; PID:AAA68635.1; PID:G5958

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:9519066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:G474372; PID:AA50095.1; PID:G474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 |||
 DB 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 208

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PID:AA50094.1; PID:G4743

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:9519066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCW>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

Search completed: December 3, 2004, 00:38:40
 Job time : 11.8 secs

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FT DISULFID 163 198 By similarity.
FT CARBOHYD 165 165 N-linked (GlcNAc...) (potential).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 51 Q.
FT REPEAT 52 59 By similarity.
FT REPEAT 60 67 N-linked (GlcNAc...) (potential).
FT REPEAT 68 75 N-linked (GlcNAc...) (potential).
FT NON_TER 232 232 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMMER 36
Db 157 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMMER 192

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
ID 095145; Q95200;
AC 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OC Macaca sylvanus (Barbary ape).
OC Bukariyola; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
ON NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW

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FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 51 58 By similarity.
FT REPEAT 61 68 N-linked (GlcNAc...) (potential).
FT REPEAT 69 76 N-linked (GlcNAc...) (potential).
SQ SEQUENCE 238 AA; 26123 MW; 5F59A2BCB3531B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMMER 36
Db 158 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMMER 193

RESULT 3
PRIO_THEGE STANDARD; PRT; 238 AA.
ID 095270;
AC 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Theropithecus.
ON NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
GN Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN <1 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BF602243EDB CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 193

RESULT 4
Q06XR1 PRELIMINARY; PRT; 238 AA.
AC Q06XR1;
DT 01-JUN-2003 (Tremblrel. 24, Created)
DT 01-JUN-2003 (Tremblrel. 24, Last sequence update)
DT 01-MAR-2004 (Tremblrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AA083635.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 193; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 36
DB 158 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 193

RESULT 5
Q08VH4 PRELIMINARY; PRT; 240 AA.
AC Q08VH4;

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DT 01-MAR-2002 (Tremblrel. 20, Created)
DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 100.0%; Score 193; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 36
DB 165 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMER 200

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callitrichus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Callitrichus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL; U08312; AAC50100.1; -
 DR PIR; S71048; S71048.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR00817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT SIGNAL 1 1
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 >241 Major prion protein.
 FT DISULFID 172 207 Removed in mature form (By similarity).
 FT LIPID 223 223 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CABC93 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5,4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTIKQHTVTTTNGENFTETDVKMER 36
 Db 166 NNFVHDCVNTIKQHTVTTTNGENFTETDVKMER 201

RESULT 7
 ID PIRIO MANSP STANDARD; PRT; 241 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillinae.
 NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -!- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -!- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

CC transmissible mink encephalopathy (TME), etc.
 CC -!- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).

DR EMBL; U08303; AAC50091.1; -
 DR PIR; S71056; S71056.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR00817; Prion.
 DR Pfam; PF03991; Prion; 1.
 DR Pfam; PF00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 1
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 >241 Major prion protein.
 FT LIPID 223 223 Removed in mature form (By similarity).
 FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5,4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTIKQHTVTTTNGENFTETDVKMER 36
 Db 166 NNFVHDCVNTIKQHTVTTTNGENFTETDVKMER 201

RESULT 8
 ID PIRIO CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Cercopithecoidea.
 NCBI_TaxID=9534, 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -!- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -!- SUBUNIT: Prp has a tendency to aggregate yielding polymers called


```

CC      "rda".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL: U08291; AAC50080.1; -.
CC      DR EMBL: U08292; AAC50081.1; -.
CC      DR PIR: S53627; S53627.
CC      DR HSSP: P23907; 1G04.
CC      DR InterPro: IPR000817; Prion.
CC      DR Pfam: PF00377; Prion; 1.
CC      DR PRINTS: PR00341; PRION.
CC      DR PROSITE: PS00291; PRION_1; 1.
CC      DR PROSITE: PS00706; PRION_2; 1.
CC      KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT SIGNAL 1 22
CC      FT CHAIN 23 222
CC      FT PROPEP 223 245
CC      FT LIPID 222 222
CC      FT DISUPRID 171 206
CC      FT CARBOHYD 173 173
CC      FT CARBOHYD 189 189
CC      FT DOMAIN 51 83
CC      FT REPEAT 51 59
CC      FT REPEAT 60 67
CC      FT REPEAT 68 75
CC      FT REPEAT 76 83
CC      FT REPEAT 77 84
CC      SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 245;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
CC      DB 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200

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RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rda".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL: U75386; AAB50625.1; -.
CC      DR HSSP: P23907; 1G04.
CC      DR InterPro: IPR000817; Prion.
CC      DR Pfam: PF00377; Prion; 1.
CC      DR PRINTS: PR00341; PRION.
CC      DR PROSITE: PS00291; PRION_1; 1.
CC      DR PROSITE: PS00706; PRION_2; 1.
CC      KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT SIGNAL 1 1
CC      FT CHAIN 16 223
CC      FT PROPEP 224 246
CC      FT LIPID 223 223
CC      FT DISUPRID 172 207
CC      FT CARBOHYD 174 174
CC      FT CARBOHYD 190 190
CC      FT DOMAIN 44 84
CC      FT REPEAT 44 52
CC      FT REPEAT 53 60
CC      FT REPEAT 61 68
CC      FT REPEAT 69 76
CC      FT REPEAT 77 84
CC      SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 246;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
CC      DB 166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

```

RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75387; AAB50626.1; --
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion_1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC NON TER 1 1
 CC SIGNAL <1 15
 CC CHAIN 16 223
 CC PROPEP 224 246
 CC LIPID 223 223
 CC DISULFID 172 207
 CC CARBOHYD 174 174
 CC CARBOHYD 190 190
 CC DOMAIN 44 84
 CC REPEAT 44 52
 CC REPEAT 53 60
 CC REPEAT 61 68
 CC REPEAT 69 76
 CC REPEAT 77 84
 CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 100.0%; Score 193; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTNGENTFTEDVQKMER 36
 DB 166 NNFFVHDCVNTTIKQHTVTTTNGENTFTEDVQKMER 201
 RESULT 11
 PRTIO CERTO STANDARD; PRT; 246 AA.
 ID PRTIO CERTO
 AC Q95176;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Cercopithecus torquatus alys (Red-crowned mangabey) (Sooty mangabey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.

OX NCBI_TaxID=9531;
 RN [1]
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75385; AAB50628.1; --
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion_1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC NON TER 1 1
 CC SIGNAL <1 15
 CC CHAIN 16 223
 CC PROPEP 224 246
 CC LIPID 223 223
 CC DISULFID 172 207
 CC CARBOHYD 174 174
 CC CARBOHYD 190 190
 CC DOMAIN 44 84
 CC REPEAT 44 52
 CC REPEAT 53 60
 CC REPEAT 61 68
 CC REPEAT 69 76
 CC REPEAT 77 84
 CC SEQUENCE 246 AA; 26914 MW; F58679CBEC5AD07 CRC64;
 Query Match 100.0%; Score 193; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTNGENTFTEDVQKMER 36
 DB 166 NNFFVHDCVNTTIKQHTVTTTNGENTFTEDVQKMER 201
 RESULT 12
 PRTIO ERYPA STANDARD; PRT; 246 AA.
 ID PRTIO ERYPA
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

```

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Erythrocebus.
OC NCBI_TaxID=9538;
RN [1]
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C.; Dekker J.T.; Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@sb-sib.ch).
CC -----
DR EMBL; U75388; AAB50627.1; -.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR KEGG; Glycylproteins; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201
RESULT 13
AA083636 PRELIMINARY; PRT; 246 AA.
AC AA083636;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

```

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DE Prion protein (Fragment).
GN PRNP.
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A.
RA Jeong B.H.; Lee Y.J.; Lee K.H.; Kim Y.S.;
RT "Polymorphisms of the prion protein gene in Korea."
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY219883; AA083636.1; -.
KM Prion.
FT FT NON_TER 1 246
FT SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
Query Match 100.0%; Score 193; DB 2; Length 246;
Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201
RESULT 14
Q8VHV5 PRELIMINARY; PRT; 248 AA.
ID Q8VHV5;
DT 01-MAR-2002 (TREMBlrel. 20, Created)
DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Clethrionomys glareolus (Bank vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Clethrionomys.
OC NCBI_TaxID=51090;
RN [1]
RN SEQUENCE FROM N.A.
RA Dell'Omo G.; Agrimi U.; Di Bari M.; Windl O.; Vaccari G.; Nonno R.;
RA Di Gardo G.; Kretschmar H.A.; Wolfer D.P.; Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367624; AAL57231.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT FT NON_TER 248 248
FT SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
Query Match 100.0%; Score 193; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. NO. 5.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208
RESULT 15
PRIO CALJA STANDARD; PRT; 252 AA.
ID PRIO CALJA;
AC P40247;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)

```

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DT 05-UTL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Calitrichix jacobus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Calitrichidae; Calitrichix.
OX NCBI_TaxId=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL/ U08304; AAC50092.1; -.
DR PIR/ S53634; S53634.
DR HSPSP/ P23907; I604.
DR InterPro/ IPR00817; Prion.
DR Pfam/ PF00377; Prion; 1.
DR PRINTS/ PR00341; Prion octapep; 6.
DR PROSITE/ PS00291; PRION_1; 1.
DR PROSITE/ PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
FT REPEAT 90 5.
SQ SEQUENCE 252 AA; 27639 MW; B2800860FDC664 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5.7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:30
 Job time : 59.1902 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Parent AA: *
1: /cgn2_6/ptodaca/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodaca/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodaca/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodaca/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodaca/1/iaa/PCtus_COMB.pep.*
6: /cgn2_6/ptodaca/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10
2	193	100.0	245	4	US-09-431-887-5
3	193	100.0	245	4	US-09-431-887-15
4	193	100.0	252	4	US-09-431-887-13
5	193	100.0	252	4	US-09-431-887-17
6	193	100.0	253	1	US-08-242-188-2
7	193	100.0	253	1	US-08-509-261A-2
8	193	100.0	253	1	US-08-660-626-8
9	193	100.0	253	1	US-08-692-892-2
10	193	100.0	253	2	US-08-713-939A-2
11	193	100.0	253	2	US-08-868-162A-22
12	193	100.0	253	3	US-09-031-168-8
13	193	100.0	253	3	US-09-128-450-10
14	193	100.0	253	3	US-09-036-579-2
15	193	100.0	253	3	US-09-823-494-20
16	193	100.0	253	3	US-09-550-374-2
17	193	100.0	253	4	US-09-431-887-1
18	193	100.0	253	4	US-09-431-887-2
19	193	100.0	253	4	US-09-431-887-3
20	193	100.0	253	4	US-09-431-887-4
21	193	100.0	253	4	US-09-431-887-7
22	193	100.0	253	4	US-09-431-887-8
23	193	100.0	253	4	US-09-431-887-9
24	193	100.0	253	4	US-09-431-887-10
25	193	100.0	253	4	US-09-431-887-11
26	193	100.0	253	4	US-09-431-887-12
27	193	100.0	253	4	US-09-431-887-14

28	193	100.0	253	4	US-09-431-887-16	Sequence 16, Appl
29	193	100.0	253	4	US-09-431-887-18	Sequence 18, Appl
30	193	100.0	253	4	US-09-431-887-19	Sequence 19, Appl
31	193	100.0	253	4	US-09-943-906-2	Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8	Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57	Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72	Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3	Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1	Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1	Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7	Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1	Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1	Sequence 1, Appl
41	193	100.0	254	2	US-08-868-162A-21	Sequence 21, Appl
42	193	100.0	254	3	US-09-031-168-7	Sequence 7, Appl
43	193	100.0	254	3	US-09-128-450-19	Sequence 19, Appl
44	193	100.0	254	3	US-09-128-450-28	Sequence 28, Appl
45	193	100.0	254	3	US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

```
RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; TITLE OF INVENTION: Formation and use of prion protein
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valetta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
DB 84 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 119
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RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 36
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 200

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 36
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 200

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 36
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 207

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 36
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMMER 207

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Karl Bobicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

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FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match          100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Bosicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

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US-08-509-261A-2
Query Match          100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: AsciiI
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match          100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTKGENTETDVKMMR 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

```

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTKGNTFTDVKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTKGNTFTDVKMMR 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTKGNTFTDVKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTKGNTFTDVKMMR 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962569
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVHDCVNITIKQHTVTTTGGENTETDVKKMER 208

Query 1
1 NNFFVHDCVNITIKQHTVTTTGGENTETDVKKMER 36
|||||
|||||

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVHDCVNITIKQHTVTTTGGENTETDVKKMER 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRP
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVHDCVNITIKQHTVTTTGGENTETDVKKMER 208

Query 1
1 NNFFVHDCVNITIKQHTVTTTGGENTETDVKKMER 36
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|||||

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

! TOPOLOGY: linear
! MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
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DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 208

RESULT 15
US-09-823-494-20

; Sequence 20, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Cheesbro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
|||
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:18:57
Job time: 14.6328 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHCVNITIKQHTVTYTKGENTEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/ptodata/1/pubppaa/PCT_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
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- 10: /cgn2_6/ptodata/1/pubppaa/US09C_PUBCOMB.pep:*
- 11: /cgn2_6/ptodata/1/pubppaa/US09_NEW_PUB.pep:*
- 12: /cgn2_6/ptodata/1/pubppaa/US10_PUBCOMB.pep:*
- 13: /cgn2_6/ptodata/1/pubppaa/US10C_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/1/pubppaa/US10C_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/1/pubppaa/US10D_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/1/pubppaa/US10D_PUBCOMB.pep:*
- 17: /cgn2_6/ptodata/1/pubppaa/US10D_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pep:*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pep:*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	US-10-050-902-348	Sequence 348, App
2	193	100.0	117	US-10-050-998-348	Sequence 348, App
3	193	100.0	117	US-10-346-190-89	Sequence 89, Appl
4	193	100.0	124	US-10-050-902-324	Sequence 324, App
5	193	100.0	124	US-10-050-998-324	Sequence 324, App
6	193	100.0	124	US-10-346-190-93	Sequence 93, Appl
7	193	100.0	141	US-10-612-356A-1	Sequence 1, Appl1
8	193	100.0	162	US-09-745-003-10	Sequence 10, Appl
9	193	100.0	163	US-10-104-047-2013	Sequence 2013, Ap
10	193	100.0	164	US-09-745-003-12	Sequence 12, Appl
11	193	100.0	200	US-10-470-848-10	Sequence 10, Appl
12	193	100.0	208	US-10-470-848-3	Sequence 3, Appl
13	193	100.0	208	US-10-745-393-1	Sequence 1, Appl1

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl
18	193	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebhel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Tisbec, Alain
APPLICANT: Maurel, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT FILING DATE: 2002-01-18
PRIOR FILING DATE: 2002-01-18
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-05-04
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 3
US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:

APPLICANT: Bachmann, Martin
APPLICANT: Maurel, Patrick
APPLICANT: Pelliccioli, Etica
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT FILING DATE: 2003-01-17
PRIOR FILING DATE: 2003-01-17
PRIOR FILING DATE: 2002-07-18
PRIOR FILING DATE: 2002-07-18
PRIOR FILING DATE: 2002-07-08
PRIOR FILING DATE: 2002-06-20
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166

PRIOR FILING DATE: 2002-01-21

PRIOR APPLICATION NUMBER: 10/050,902

PRIOR FILING DATE: 2002-01-18

NUMBER OF SEQ ID NOS: 164

SOFTWARE: PatentIn version 3.1

SEQ ID NO 89

LENGTH: 117

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 4
US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Tisbec, Alain
APPLICANT: Maurel, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT FILING DATE: 2002-01-18
PRIOR FILING DATE: 2002-01-18
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-05-04
PRIOR FILING DATE: 2001-10-05
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: mPrp construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 88

RESULT 5
US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:

APPLICANT: Bachmann, Martin
APPLICANT: Maurel, Patrick
APPLICANT: Pelliccioli, Etica
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT FILING DATE: 2003-01-17
PRIOR FILING DATE: 2003-01-17
PRIOR FILING DATE: 2002-07-18
PRIOR FILING DATE: 2002-07-18
PRIOR FILING DATE: 2002-07-08
PRIOR FILING DATE: 2002-06-20
PRIOR FILING DATE: 2002-06-20

APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Pjosesek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
DB 53 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
DB 53 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lohrs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
DB 84 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins, Related Reagents
FILE REFERENCE: PEP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
DB 82 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 193; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 193; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCP
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 193; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 8,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 178

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCP
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 193; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Paatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Scharschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; FILE REFERENCE: 12290 US3 (979/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 193; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

RESULT 14

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US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

```

```

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
Db      151 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 186

```

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RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

```

```

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
Db      151 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 186

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Search completed: December 3, 2004, 01:07:46
 Job time : 42.6098 secs

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CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antitubercular, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGTGNETETDVGMERVVEQ 40
 DB 52 NNFVHDCVNITIKQHTVTTTGTGNETETDVGMERVVEQ 91

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 XX
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)

XX Human prion protein/cysteine-containing peptide fusion protein.
 DE
 XX
 KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutagen;
 KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-028549P.
 PR 05-OCT-2001; 2001US-032698P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (MAUR/) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisbet A, Sebbel P, Piossek C;
 XX WPI; 2002-66514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organizer comprising at least one first attachment
 CC site, where the organizer is connected to the core particle by at least
 CC one second attachment site; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold through the association to form an ordered and
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune disease, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGTGNETETDVGMERVVEQ 40
 DB 52 NNFVHDCVNITIKQHTVTTTGTGNETETDVGMERVVEQ 91

RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 XX
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)

XX Modified human prion protein amino acid sequence.
 DE
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob disease; prion; mutant; mutagen.
 XX
 OS Synthetic.
 OS prion.
 XX
 PN WO2003059386-A2.

PD 24-JUL-2003.
 XX
 XX
 PF 17-JAN-2003; 2003MO-EP000460.
 XX
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002MO-IB000166.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 XX WPI; 2002-627351/67.
 DR
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 PS Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 Db 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutein;
 KM graft versus host disease; Ige-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS
 XX

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000168.
 XX
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STRAU) STRAUENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Luegend R, Straufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisect A, Seibel P, Plosek C;
 XX
 DR WPI: 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7, Page 415; 418pp; English.
 XX

The invention relates to a composition comprising: (a) a non-natural molecular scaffold comprising: (1) a core particle selected from: (1) a core particle of a non-natural origin; and (2) a core particle of natural origin; and (1) an antigen or antigenic determinant with at least one covalent bond; (b) an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is attached to the scaffold by at least one covalent bond; (c) an antigen or antigenic determinant with at least one attachment site selected from: (1) an attachment site not naturally occurring with the antigen or antigenic determinant; and (1) an attachment site naturally occurring with the antigen or antigenic determinant; where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and where the antigen or antigenic determinant and the scaffold interact. Also included is a process for producing a non-naturally occurring array. ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a modified antigen for use in the array of the invention. The antigen is modified to possess a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N- or C-terminal linker peptide which serves as the attachment point to a virus like particle or bacterial protein (the scaffold protein).

XX
 SQ Sequence 124 AA;

Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTGGNTFTDVGMMERVVEQ 40
 DB 53 NNFDVCNITIKOHTVTTTGGNTFTDVGMMERVVEQ 92

RESULT 6
 ID ADD24200
 XX ADD24200 standard; protein; 124 AA.
 AC
 XX ADD24200;
 XX
 XX 15-JAN-2004 (first entry)
 DT
 XX mPrP-EK-Fc* cleaved protein sequence.
 DE
 XX
 KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS Unidentified.
 OS
 XX
 XX WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 PF 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 PI WPI: 2003-598483/56.
 DR
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g. Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-phage) and at least one prion protein or peptide bound to the virus-like particle.

Example 13; SEQ ID NO 93; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-like or a core particle with at least one first attachment site and at least one antigen or antigenic determinant that is a prion protein (PrP) or its dimer, or a PrP peptide, the antigen or antigenic determinant being bound to the virus-like or core particle. The vaccine of the invention may have neuroprotective or antiinflammatory activity. The composition is useful as a medicament or in manufacturing a medicament for the treatment or prevention of prion diseases. The prion diseases may include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob Disease. The present sequence is the amino acid sequence of the cleaved protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*) which was used during the exemplification of the invention.

XX
 SQ Sequence 124 AA;

Query Match 100.0%; Score 211; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTGGNTFTDVGMMERVVEQ 40
 DB 53 NNFDVCNITIKOHTVTTTGGNTFTDVGMMERVVEQ 92

RESULT 7
 ID AAM17686
 XX AAM17686 standard; peptide; 142 AA.
 AC
 XX AAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scarpie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jacob disease; kuru GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN W09716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96MO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556623.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scarpie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jacob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 SQ Sequence 142 AA;
 QY
 Best Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 ||||||||||||||||||||||||||||||||||||||||||||
 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX
 PI Isogaki T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S,
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides; useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 SQ Sequence 163 AA;
 QY
 Best Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 ||||||||||||||||||||||||||||||||||||||||||||
 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN W020026148-A1.
 XX
 PD 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002MO-JP000803.
PF 31-JAN-2001; 2001JP-00024279.
PR (TOHO) UNIV TOROKU.
XX Kitemoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
PT Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
PS Example 2; Page 63-64; 69pp; Japanese.
XX This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a human prion related protein of the
CC invention
SQ Sequence 200 AA;
Query Match 100.0%; Score 211; DB 5; Length 200;
Best Local Similarity 100.0%; Pred. No. 2.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 182
RESULT 10
AAB07316
ID AAB07316 standard; protein; 208 AA.
XX
AC AAB07316;
XX
DT 17-OCT-2000 (first entry)
XX
DE Mouse prion protein sequence.
XX
KM Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
OS Mus sp.
XX
FH Key 37.68 Location/Qualifiers
FT Region /note="Repeat region consisting of tandem repeats of
FT Disulfide-bond 156..191 repeat unit: PHGGGQGQ (AAB07319)"
FT Modified-site 208 /note="C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
PN WO200029850-A1.
XX
PD 25-MAY-2000.
XX
PF 27-OCT-1999; 99WO-FI000897.
XX
PR 17-NOV-1998; 98FI-00002481.
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX PA
XX PA
XX (BBSR-) BBSRC OFFICE.
XX

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
PS Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
CC Conversion of the normal cellular form of PrP into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of transmissible
CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a PrP epitope is captured by an
CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC of PrP that is occluded when the PrP is in an aggregated state
SQ Sequence 208 AA;
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 150 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 189
RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA.
XX
AC AAB07318;
XX
DT 17-OCT-2000 (first entry)
XX
DE Human prion protein sequence.
XX
KM Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
OS Homo sapiens.
XX
FH Key 29.69 Location/Qualifiers
FT Region /note="Repeat region consisting of tandem repeats of
FT Disulfide-bond 157..192 repeat unit: PHGGGQGQ (AAB07319)"
FT Modified-site 208 /note="C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
PN WO200029850-A1.
XX
PD 25-MAY-2000.
XX
PF 27-OCT-1999; 99WO-FI000897.
XX
PR 17-NOV-1998; 98FI-00002481.
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX PA
XX PA
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX Novel immunoassay for prion protein, used for the determination of

```

PT transmissible spongiform encephalopathies in bovines.
XX Disclosure; Page 43-44; 50pp; English.
PS
XX The present sequence is the human prion protein (Prp) sequence.
CC Conversion of the normal cellular form of Prp into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a Prp epitope is captured by an
CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
CC epitopes (AAB07320-B07326) are derived from the protease resistant core
CC of Prp that is occluded when the Prp is in an aggregated state
XX
SQ Sequence 208 AA;
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 190
RESULT 12
AAB07327 standard; protein; 208 AA.
XX
AC AAB07327;
XX
DT 17-OCT-2000 (first entry)
XX
DE Mouse prion protein sequence.
XX
KM Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; Prp.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT Region 37..68
FT /note= "Repeat region consisting of tandem repeats of
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Disulfide-bond 156..191
FT Modified-site 208
FT /note= "C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
PN WO200029849-A1.
XX
PD 25-MAY-2000.
XX
PF 27-OCT-1999; 99WO-FI000896.
XX
PR 17-NOV-1998; 98FI-00002480.
XX
PA (WALL-) WALLAC OY.
PA (BBSR-) BBSRC OFFICE.
PI Hope J, Barnard GJR, Birkett CR;
XX
DR WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
PT transmissible spongiform encephalopathies in mammals, comprises specific
PT capture antibody.
XX
PS Disclosure; Page 41-42; 50pp; English.
XX The present sequence is the mouse prion protein (Prp) sequence.

CC Conversion of the normal cellular form of Prp into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a Prp epitope is captured by an
CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
CC epitopes (AAB07320-B07326) are derived from the protease resistant core
CC of Prp that is occluded when the Prp is in an aggregated state
XX
SQ Sequence 208 AA;
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
DB 150 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 189
RESULT 13
AAB07329 standard; protein; 208 AA.
XX
AC AAB07329;
XX
DT 17-OCT-2000 (first entry)
XX
DE Human prion protein sequence.
XX
KM Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; Prp.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 29..69
FT /note= "Repeat region consisting of tandem repeats of
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Disulfide-bond 157..192
FT Modified-site 208
FT /note= "C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
PN WO200029849-A1.
XX
PD 25-MAY-2000.
XX
PF 27-OCT-1999; 99WO-FI000896.
XX
PR 17-NOV-1998; 98FI-00002480.
XX
PA (WALL-) WALLAC OY.
PA (BBSR-) BBSRC OFFICE.
PI Hope J, Barnard GJR, Birkett CR;
XX
DR WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
PT transmissible spongiform encephalopathies in mammals, comprises specific
PT capture antibody.
XX
PS Disclosure; Page 43-44; 50pp; English.
XX
XX The present sequence is the human prion protein (Prp) sequence.
CC Conversion of the normal cellular form of Prp into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14
 ABG31902
 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

XX 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

PI WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 190

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

XX 05-NOV-2002 (first entry)

XX Chimera-type prion protein #2.

XX Prion; follicular dendritic cells; FDC; infection; blood preparation;
 XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

PI WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX Claim 9; Page 55-57; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimera type prion related protein of the
 CC invention

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 190

Search completed: December 3, 2004, 00:55:39
 Job time : 67.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211

Sequence: 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	226	2 A53892	p1on-related prote
2	211	100.0	232	2 S71041	major p1on protei
3	211	100.0	241	2 S71048	major p1on protei
4	211	100.0	241	2 S71056	major p1on protei
5	211	100.0	245	2 S71045	major p1on protei
6	211	100.0	253	1 UJHU	major p1on protei
7	211	100.0	253	2 I84423	major p1on protei
8	211	100.0	253	2 S71055	major p1on protei
9	211	100.0	253	2 S53635	p1on protein - si
10	211	100.0	253	2 I37032	major p1on protei
11	211	100.0	253	2 I61847	major p1on protei
12	211	100.0	254	2 B34759	p1on protein - ch
13	211	100.0	254	2 A34759	p1on protein - Ch
14	211	100.0	254	2 A23544	major p1on protei
15	210	99.5	252	2 I61848	major p1on protei
16	209	99.1	264	2 S37137	p1on protein - gr
17	206	97.6	245	2 S53627	major p1on protei
18	206	97.6	252	2 S53634	major p1on protei
19	206	97.6	252	2 S53611	major p1on protei
20	206	97.6	253	2 S53624	major p1on protei
21	206	97.6	253	2 S53623	major p1on protei
22	206	97.6	253	2 S53620	major p1on protei
23	206	97.6	253	2 S53625	major p1on protei
24	206	97.6	253	2 S53617	major p1on protei
25	206	97.6	253	2 S53614	major p1on protei
26	206	97.6	253	2 S53616	major p1on protei
27	206	97.6	253	2 S53618	major p1on protei
28	206	97.6	253	2 S53619	major p1on protei
29	206	97.6	254	1 UJHYTH	major p1on p1p-Sc

30	206	97.6	256	2 JU0268	major p1on protei
31	206	97.6	257	2 A23545	major p1on p1p27-
32	206	97.6	264	2 A54330	major p1on protei
33	205	97.2	256	2 S37149	p1on protein - go
34	205	97.2	256	2 A54281	major p1on protei
35	205	97.2	260	2 S53629	major p1on protei
36	203	96.2	257	2 JU0100	major p1on protei
37	202	95.7	239	2 S53633	major p1on protei
38	200	94.8	252	2 JU6175	p1on protein - ra
39	200	28.9	267	1 UJCH	major p1on protei
40	61	28.9	267	2 A37372	p1on protein homo
41	61	28.9	273	2 A46280	p1on protein - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amylolipulanase (
44	56	26.5	511	2 C69199	phenylalanine-tRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1

A53892
p1on-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #ext_change 09-Jul-2004
C:Accession: A53892
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "p1on-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA41947.1; PID:g206392
C:Superfamily: major p1on protein

Query Match 100.0%; Score 211; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 8.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 40

DB 145 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 184

RESULT 2

major p1on protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #ext_change 09-Jul-2004
C:Accession: S71041; S53630
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g474376
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: P1on protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-231 <SCH>
A:Cross-references: EMBL:U08309
C:Superfamily: major p1on protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; p1on; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Calliobus moloch (fragment)

C/Species: Calliobus moloch

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632

R/Schatz1, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53632

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schatz1, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71056

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40

Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schatz1, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G47434

R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'U', 12-202, 'R', 204-239 <SCW>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 9.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 6

U08303

major prion protein precursor - human

N/Alternate names: 11k amyloid protein; 27-30K sinloglycoprotein; PrP 27-30; PrP 33-35C;

C/Species: Homo sapiens (man)

C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C/Accession: A24173; A40372; A05017; S14078; I5432; I68597; I58135; I59184; I79633; I796

R/Kretschmer, H.A.; Stowring, L.E.; Westaway, D.; Studdiblane, W.H.; Prusiner, S.B.; Dec

DNA 5, 315-324, 1986

A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173

A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M1389; NID:G190467; PIDN:AA60182.1; PID:G190468

R/Puckett, C.; Concannon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:91328137; PMID:1678248

A/Accession: A40372

A/Status: not compared with conceptual translation

A/Molecule type: DNA

A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G47846; PIDN:CA58442.1; PID:G47847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

R/Liello, V.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 364-367, 1986

A/Reference number: A05017; MUID:66261778; PMID:3014653

A/Accession: A05017

A/Molecule type: mRNA

A/Residues: 8-117, 119-253 <LIA>

A/Cross-references: GB:D00015; NID:G220015; PIDN:BA00011.1; PID:G220016; GB:M13667; NID:

R/Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,

EMBO J. 10, 513-519, 1991

A/Title: Amyloid protein of Gerstmann-Strausner-Scheinker disease (Indiana kindred) is

A/Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72, X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
R:Diedrich, J.F.; Knopman, D.S.; Liet, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet., 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83, 92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutational
A:Reference number: I58135; MUID:92140671; PMID:176177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91, 'PHGGMGQPHGGMGQPHGGMGQPHGGMGQPHGGMGQPHGGMGQ' <RE2>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AA821334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaer, D.; Swergold, G.D.; Willis, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, or
A:Reference number: I59184; MUID:92073400; PMID:1683708
A:Accession: I59184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AA820521.1; PID:g239878; GB:S71210; NID:
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRP
A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F:1-22/DNA: signal sequence #status predicted <SIG>
F:23-230/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F:1231-253/DNA: carboxyl-terminal propeptide #status predicted <CTP>
F:1179-214/DNA: disulfide bonds: #status predicted
F:181,197/Binding site: carbonylate (Asn) (covalent) #status predicted
F:1230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. NO. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFFHDCVNITIKOHTVTTTKGFETFDVMERVEEQ 40
Db 173 NNFFHDCVNITIKOHTVTTTKGFETFDVMERVEEQ 212

RESULT 7
184423
Major prion protein precursor (rhesus macaque)
C:Species: Macaca mulatta (rhesus macaque)
C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004
C:Accession: I84423; S53622; S71054
R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; F
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental t
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I84423
A>Status: preliminary; translated from GB/EMBL/DBJ

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A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA68635.1; PID:G595850
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210, 'R', 212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71054
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AAC50095.1; PID:G474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C:Species: Macaca nemestrina (pig-tailed macaque)
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71055; S53626
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71055
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AAC50094.1; PID:G474373
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53626
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 8-210, 'R', 212-247 <SCW>
A:Cross-references: EMBL:U08306
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 212

RESULT 9
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C:Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
A:Accession: S53635
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

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A>Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AA650096.1; PID:94743
A/Note: the source was designated as Symphalangus syndactylus
C/Suprafamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: J37032
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J.; Cell. Biol. 10, 1153-1163, 1990
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: 136907; MUID:95083661; PMID:7991600
A/Accession: J37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:9563208; PIDN:AAA68633.1; PID:95632
C/Suprafamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: J61847; MUID:95083661; PMID:7991600
R/Czeranjkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: 136907; MUID:95083661; PMID:7991600
A/Accession: J61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AAA68632.1; PID:96093
R/Schätzl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08296; NID:9474350; PIDN:AA650085.1; PID:9474351
R/Schätzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 12

prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J.; Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:9191182; PIDN:AAA37014.1; PID:9191183
C/Suprafamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9,7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J.; Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:9191180; PIDN:AAA37013.1; PID:9387056
C/Suprafamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9,7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
A/Accession: A23544
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08296
C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

C/Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S. Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; PMID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <WES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:g200528; PIDN:AAA3997.1; PID:g200529

A/Experimental source: strain NZW and I/LmJ

A/Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain di

R/Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; PMID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (Prp) in mouse brain a

A/Reference number: S02521; PMID:8816695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesebro, B.; Race, R.; Wehly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <Sig>

F/23-251/Product: major prion protein #status predicted <MAT>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180, 196/Binding site: carbonyl (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNTIKOHTVTTTGGNFETIDVQMERVVEQ 40

172 NNFVHDCVNTIKOHTVTTTGGNFETIDVQMERVVEQ 211

major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental t

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: 161848

A/Molecule type: DNA

A/Status: preliminary; translated from GB/EMBL/DBJ*

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:g595852; PIDN:AAA68636.1; PID:g5958

C/Superfamily: major prion protein

DB 172 NNFVHDCVNTIKOHTVTTTGGNFETIDVQMERVVEQ 211

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Job time: 12 secs

Query Match 99.5%; Score 210; DB 2; Length 252;
Best Local Similarity 97.5%; Pred. No. 1.3e-19;
Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNTIKOHTVTTTGGNFETIDVQMERVVEQ 40

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(Without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKKHTTTTGGKGFEDVDKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt_02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	232	PRIO_ATGE	P40246 ateles geof
2	211	100.0	238	PRIO_CERAT	Q95145 cercopithec
3	211	100.0	238	PRIO_THEGE	Q95270 theopithec
4	211	100.0	238	Q86XRI	Q86XRI homo sapien
5	211	100.0	240	Q8VHV4	Q8VHV4 microtus ag
6	211	100.0	241	PRIO_CALMO	P40248 callipecus
7	211	100.0	241	PRIO_MANS	P40255 mandillius
8	211	100.0	245	PRIO_CERAE	P40250 cercopithec
9	211	100.0	246	PRIO_CERMO	P61761 cercopithec
10	211	100.0	246	PRIO_CERNE	P61762 cercopithec
11	211	100.0	246	PRIO_CERPO	Q95176 cercopithec
12	211	100.0	246	PRIO_ERYTA	Q95174 erythrocebu
13	211	100.0	246	AA083636	AA083636 homo sapi
14	211	100.0	248	Q8VHV5	Q8VHV5 cichthionom
15	211	100.0	252	PRIO_CALJA	P40247 callithrix
16	211	100.0	252	PRIO_CEBAP	P40249 cebus apell
17	211	100.0	253	PRIO_COLGU	P40251 colobus gue
18	211	100.0	253	PRIO_GORGO	P40252 gorilla gor
19	211	100.0	253	PRIO_HUMAN	P04156 homo sapien
20	211	100.0	253	PRIO_HYLDA	P61766 hylobates l
21	211	100.0	253	PRIO_HYLSY	P61767 hylobates s
22	211	100.0	253	PRIO_MACFA	P40254 macaca fasc
23	211	100.0	253	PRIO_PANTR	P61768 pan troglod
24	211	100.0	253	PRIO_PONPR	P40256 pongo pygma
25	211	100.0	253	PRIO_PREFR	P40257 presbytis f
26	211	100.0	253	Q6FGR8	Q6FGR8 homo sapien
27	211	100.0	253	Q6JL99	Q6JL99 macaca mula
28	211	100.0	253	Q9Z0T5	Q9Z0T5 meriones un
29	211	100.0	253	AA580162	AA580162 homo sapi
30	211	100.0	253	AA12192	AA12192 macaca mu
31	211	100.0	254	PRIO_CRIGR	Q60506 cricetus

32	211	100.0	254	PRIO_CRIMI	Q60468 cricetus
33	211	100.0	254	PRIO_MOUSE	P04925 mus musculu
34	211	100.0	254	PRIO_RAT	P13852 rattus norv
35	211	100.0	254	PRIO_SIGHI	Q920C3 sigmodon hi
36	211	100.0	254	Q920T4	Q920T4 sigmodon fu
37	211	100.0	254	Q8VHV6	Q8VHV6 apodemus ey
38	211	100.0	254	AAD19993	AAD19993 rattus no
39	211	100.0	277	Q6SESI	Q6SESI homo sapien
40	211	100.0	277	AA21603	AA21603 homo sapi
41	211	100.0	285	Q75942	Q75942 homo sapien
42	210	99.5	220	Q866W7	Q866W7 ochotona pr
43	210	99.5	248	Q866V6	Q866V6 diceros bic
44	210	99.5	260	PRIO_SAIISC	P40258 saimiri sci
45	209	99.1	215	Q811W3	Q811W3 spalax leuc

ALIGNMENTS

RESULT 1
PRIO_ATGE STANDARD; PRT; 232 AA.
ID PRIO_ATGE
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U08309; AAC50097.1; -.
CC PIR: S71041; S71041.
CC HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1
FT SIGNAL 15
FT CHAIN 16
FT PROPEP 215
FT LIPID 214
FT LIPID 214
By similarity.
Major prion protein.
Removed in mature form (By similarity).
GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity.
FT FT SIGNAL 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05C64A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 157 NNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
ID PRIO CERAT 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_Taxid=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@sdb-sdb.ch).
CC -----
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50623.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON TER 1 1
FT FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 215 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 158 NNFVHDCVNIITIKOHTVTTTGGNFETDVKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
ID PRIO THEGE 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@sdb-sdb.ch).
CC -----
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL.
FT CHAIN 1 15
FT PROPEP 216 215
FT DISULFID 164 199
FT LIPID 215 215
FT CARBOHYD 166 166
FT CARBOHYD 182 182
FT DOMAIN 44 83
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFE6022435DB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 197

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (T-EMBLrel. 24, Created)
DT 01-JUN-2003 (T-EMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (T-EMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JMN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AA083635.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP.1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 197

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4;

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DT 01-MAR-2002 (T-EMBLrel. 20, Created)
DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (T-EMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OC NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP.1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 240;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 204

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Callipebus moloch (Dukey titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callicebinae;
OC Callicebinae.
OC NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC -----
DR EMBL; U08312; AAC50100.1; -.
DR PIR; S71048; S71048.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT DISULFD 172 207 By similarity.
FT LIPID 223 223 GPI-anchor amidated serine (By
FT CARBOHYD 174 174 similarity).
FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 N-linked (GlcNAc... ) (Potential).
FT REPEAT 44 52 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 53 60 Q.
FT REPEAT 61 68 By similarity.
FT REPEAT 69 76 Major prion protein.
FT REPEAT 77 84 Removed in mature form (By similarity).
FT NON TER 241 241 GPI-anchor amidated serine (By
SQ SEQUENCE 241 AA; 26373 MW; C6D2013E7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPVHDCVNTIKQHTVTTTKGNTFTDVKMERVVEQ 40
DB 166 NNPVHDCVNTIKQHTVTTTKGNTFTDVKMERVVEQ 205

RESULT 7
PRIO_MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandillus sphinx (Mandill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Mandillinae.
OX NCBI_TaxID=9561;
[1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISASS: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

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CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08303; AAC50091.1; -.
DR PIR; S71056; S71056.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By
FT DISULFD 172 207 similarity).
FT CARBOHYD 174 174 By similarity.
FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 N-linked (GlcNAc... ) (Potential).
FT REPEAT 44 52 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 53 60 Q.
FT REPEAT 61 68 By similarity.
FT REPEAT 69 76 Major prion protein.
FT REPEAT 77 84 Removed in mature form (By similarity).
FT NON TER 241 241 GPI-anchor amidated serine (By
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPVHDCVNTIKQHTVTTTKGNTFTDVKMERVVEQ 40
DB 166 NNPVHDCVNTIKQHTVTTTKGNTFTDVKMERVVEQ 205

RESULT 8
PRIO_CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecoidea.
OX NCBI_TaxID=9534, 36224;
[1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

```

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CC -1- "SCELLULAR LOCATION": Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC -1- animals infected with the degenerative neurological diseases kuru,
CC -1- Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC -1- (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC -1- transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@ebi.ac.uk).
CC -----
CC DR EMBL; U08291; AAC50080.1; -.
CC DR EMBL; U08292; AAC50081.1; -.
CC DR PIR; S53627; S53627.
CC DR PIR; S71045; S71045.
CC DR HSSP; P23907; IG04.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; Prion; 1.
CC DR Pfam; PF03991; Prion octapep; 5.
CC DR PRINTS; PR00341; PRION.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT SIGNAL 1 22
CC FT CHAIN 23 222
CC FT PROPEP 223 245
CC FT LIPID 222 222
CC FT DISULFID 171 206
CC FT CARBOHYD 173 173
CC FT CARBOHYD 189 189
CC FT DOMAIN 51 83
CC FT REPEAT 51 59
CC FT REPEAT 60 67
CC FT REPEAT 68 75
CC FT REPEAT 76 83
CC SO SEQUENCE 245 AA; 26885 MW; D562B5B8E2726C9A CRC64;
CC -----
CC Query Match 100.0%; Score 211; DB 1; Length 245;
CC Best Local Similarity 100.0%; Pred. No. 3.7e-19;
CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC -----
CC 1 NNPVHDCVNITIKOHTVTTTIGENFTETDVMMERVVQ 40
CC |||||
CC Db 165 NNFVHDCVNITIKOHTVTTTIGENFTETDVMMERVVQ 204
CC -----
CC RESULT 9
CC PRIO_CERMO STANDARD; PRT; 246 AA.
CC ID PRIO_CERMO
CC AC P61761; Q95172; Q95173;
CC DT 01-NOV-1997 (Rel. 35, Created)
CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
CC DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
CC GN Name=PRNP;
CC OS Cercopithecus mona (Mona monkey).
CC OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC OC Cercopithecinae; Cercopithecus.
CC OC NCBI_TaxID=36226;
CC RN [1]
CC RP SEQUENCE FROM N.A.
CC RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
CC RT "Evidence for an increased substitution rate of the hominoid prion
CC protein gene during the period of brain expansion.",

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CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rods".
CC
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC -----
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CC      use by non-profit institutions as long as its content is in no way
CC      modified and this statement is not removed. Usage by and for commercial
CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC -----
CC
CC DR EMBL; U75386; AAB50625.1; -.
CC DR HSSP; P23907; IG04.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; Prion; 1.
CC DR Pfam; PF03991; Prion octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC DR KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT NON TER 1 1
CC FT SIGNAL 1 15 By similarity.
CC FT CHAIN 16 223 Major prion form.
CC FT PROPEP 224 246 Removed in mature form (By similarity).
CC FT LIPID 223 223 GPI-anchor amidated serine (By
CC      similarity).
CC FT DISULFID 172 207 By similarity.
CC FT CARBOHYD 174 174 N-linked (GlcNAc..)(Potential).
CC FT CARBOHYD 190 190 N-linked (GlcNAc..)(Potential).
CC FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
CC      Q.
CC FT REPEAT 44 52
CC FT REPEAT 53 60 1.
CC FT REPEAT 61 68 2.
CC FT REPEAT 69 76 3.
CC FT REPEAT 77 84 4.
CC FT REPEAT 84 84 5.
CC SQ SEQUENCE 246 AA; 26900 MM; 835DI47CA2BAFDD3 CRC64;
CC
CC Query Match 100.0%; Score 211; DB 1; Length 246;
CC Best Local Similarity 100.0%; Pct. No. 3,8e-19;
CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0
CC
CC QY 1 NNFVHDCVNITIKQHTVTTTNGENFTEDYKMERVEEQ 40
CC      |||||
CC Db 166 NNFVHDCVNITIKQHTVTTTNGENFTEDYKMERVEEQ 205
CC
CC RESULT 10
CC PRIO_CERNE STANDARD; PRT; 246 AA.
CC AC P61762; Q95172; Q95173;
CC DT 01-NOV-1997 (Rel. 35. Created)
CC DT 01-NOV-1997 (Rel. 35. Last sequence update)
CC DT 05-JUL-2004 (Rel. 44. Last annotation update)
CC DE Major prion protein precursor (Prp) (Pr27-30) (PrP33-35C) (Fragment).
CC GN Name=PRNP;
CC OS Cercopithecus neglectus (De Brazza's monkey).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
CC OC Cercopithecinae; Cercopithecus.
CC OX NCBI_TaxID=36227;
CC RN [1]
CC RP SEQUENCE FROM N.A.

```

RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
 CC -----
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 CC
 CC EMBL; U75387; AAB50626.1; -
 CC HSSP; P23907; IG04
 CC InterPro: IPR000817; Prion.
 CC Pfam; PF00397; Prion; 1.
 CC DR Pfam; PF00397; Prion; 1.
 CC DR PRINTS; PR00341; PRION.
 CC DR PROSITE; PS00291; PRION_1; 1.
 CC DR PROSITE; PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 CC
 CC Query Match 100.0%; Score 211; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNIITKHTVTTTNGENFTETDVXKMERVVEQ 40
 CC Db 166 NNFVHDCVNIITKHTVTTTNGENFTETDVXKMERVVEQ 205
 CC
 CC RESULT 11
 CC PIRIO CERTO STANDARD; PRT; 246 AA.
 CC AC 095176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 CC OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Buteleostomi;
 CC OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC OC Cercopithecinae; Cercopithecus.

OX NCBI_TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
 CC -----
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 CC
 CC EMBL; U75385; AAB50628.1; -
 CC HSSP; P23907; IG04
 CC InterPro: IPR000817; Prion.
 CC Pfam; PF00397; Prion; 1.
 CC DR Pfam; PF00397; Prion; 1.
 CC DR PRINTS; PR00341; PRION.
 CC DR PROSITE; PS00291; PRION_1; 1.
 CC DR PROSITE; PS00706; PRION_2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26914 MW; F58679CBEC5ADCT CRC64;
 CC
 CC Query Match 100.0%; Score 211; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNIITKHTVTTTNGENFTETDVXKMERVVEQ 40
 CC Db 166 NNFVHDCVNIITKHTVTTTNGENFTETDVXKMERVVEQ 205
 CC
 CC RESULT 12
 CC PIRIO ERYPA STANDARD; PRT; 246 AA.
 CC AC 095174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopitheciidae;
 OC Cercopitheciinae; Erythrocebus.
 RN NCBI_TaxID=9538;
 [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuy A.C., Dekker J.T., Goudemits J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75388; AAB50627.1; --
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF03377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223 By similarity.
 CC FT PROPEP 224 246 Major prion protein.
 CC FT LIPID 223 223 Removed in mature form (By similarity).
 CC FT DISULFID 172 207 GPI-anchor amidated serine (By
 CC CARBOHYD 174 174 similarity).
 CC CARBOHYD 190 190 By similarity.
 CC DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 CC REPEAT 44 52 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 CC REPEAT 53 60 1.
 CC REPEAT 61 68 2.
 CC REPEAT 69 76 3.
 CC REPEAT 77 84 4.
 CC REPEAT 84 84 5.
 CC SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (Tremblrel. 27, Created)
 DT 02-MAR-2004 (Tremblrel. 27, Last sequence update)
 DT 02-MAR-2004 (Tremblrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 RN NCBI_TaxID=9606;
 [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC EMBL: AY219883; AAO83636.1; --
 CC Prion.
 CC FT NON_TER 1 1
 CC FT NON_TER 246 246
 CC SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205
 RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (Tremblrel. 20, Created)
 DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
 DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Cletionomyx glazouls (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC Cletionomyx.
 CC NCBI_TaxID=51090;
 CC FT NON_TER 1 1
 CC FT NON_TER 248 248
 CC SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUL-2004 (rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (PrP33-35C).
GN Name=PRNP;
OS Calitrix jaccus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrix.
OC NCBI_taxid=9483;
RN (1)
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08304; AAC50092.1; -.
DR PIR; S53634; S53634.
DR HSP; P23907; I604.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion, 1.
DR Pfam; PF03991; Prion, octapep, 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60F5CE664 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNTTKKHTVTTTGGENTFDVQMERVVEQ 40
DB 172 NNFVHDCVNTTKKHTVTTTGGENTFDVQMERVVEQ 211

```

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211
Sequence: 1 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A.COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A.COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B.COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS.COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	211	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	211	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	211	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	211	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	211	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	211	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	211	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	211	100.0	253	1 US-08-692-892-2	Sequence 2, Appl
10	211	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	211	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	211	100.0	253	3 US-09-031-168-8	Sequence 8, Appl
13	211	100.0	253	3 US-09-128-450-20	Sequence 20, Appl
14	211	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	211	100.0	253	3 US-09-823-49A-20	Sequence 20, Appl
16	211	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	211	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	211	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	211	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	211	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	211	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	211	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	211	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	211	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	211	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	211	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	211	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	211	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254	2 US-08-713-939A-1	Sequence 21, Appl
41	211	100.0	254	2 US-08-868-162A-21	Sequence 7, Appl
42	211	100.0	254	3 US-09-031-168-7	Sequence 19, Appl
43	211	100.0	254	3 US-09-128-450-19	Sequence 28, Appl
44	211	100.0	254	3 US-09-128-450-28	Sequence 1, Appl
45	211	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Asciii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valetta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5970
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 3.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
Db 84 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 123

RESULT 2
 US-09-431-887-5
 ; Sequence 5, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus aethiops
 US-09-431-887-5

Query Match 100.0%; Score 211; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 6.2e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
 DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 204

RESULT 3
 US-09-431-887-15
 ; Sequence 15, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 15
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus diana
 US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 6.2e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
 DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 204

RESULT 4
 US-09-431-887-13
 ; Sequence 13, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 13
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Callithrix sp.
 US-09-431-887-13

Query Match 100.0%; Score 211; DB 4; Length 252;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
 DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 211

RESULT 5
 US-09-431-887-17
 ; Sequence 17, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentin Ver. 2.0
 ; SEQ ID NO 17
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Cebus sp.
 US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
 DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 211

RESULT 6
 US-08-242-188-2
 ; Sequence 2, Application US/08242188
 ; Patent No. 556186
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bosicovic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/242,188

FILING DATE: 13-MAY-1994
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Bosicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/014001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 854-5277
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 7
 US-08-509-261A-2
 Sequence 2, Application US/08509261A
 Patent No. 5763244
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Telling, Glenn
 TITLE OF INVENTION: Method of Detecting Prions
 TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Bosicevic & Reed, LLP
 STREET: 285 Hamilton Avenue, Suite 200
 CITY: Palo Alto
 STATE: CA
 COUNTRY: USA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq for Windows Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/509,261A
 FILING DATE: 31-JUL-1995
 CLASSIFICATION: 800
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Bosicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 6510-030001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650-327-3400
 TELEFAX: 650-327-3231
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 8
 US-08-660-626-8
 Sequence 8, Application US/08660626
 Patent No. 5789655
 GENERAL INFORMATION:
 APPLICANT: Stanley B. Prusiner
 APPLICANT: Glenn C. Telling
 APPLICANT: Fred E. Cohen
 APPLICANT: Michael R. Scott
 TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
 TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
 NUMBER OF SEQUENCES: 13
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson
 STREET: 2200 Sand Hill Road, Suite 100
 CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Asciii
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/660,626
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Valeta Gregg
 REGISTRATION NUMBER: 35,127
 REFERENCE/DOCKET NUMBER: 07532/003001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 322-5070
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 8:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 9
 US-08-692-892-2
 Sequence 2, Application US/08692892
 Patent No. 5792901
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPr
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSER: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

Query 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
|||||

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

Query 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40
|||||

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPLOGY: linear
MOLECULUS TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suseette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 212

Search completed: December 3, 2004, 00:18:57
Job time: 15.1475 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTTTGKENTFDVKKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	211	100.0	117	US-10-050-902-348	Sequence 348, App
3	211	100.0	117	US-10-050-902-348	Sequence 89, Appl
4	211	100.0	117	US-10-050-902-324	Sequence 324, App
5	211	100.0	124	US-10-050-902-324	Sequence 324, App
6	211	100.0	124	US-10-050-902-324	Sequence 324, App
7	211	100.0	124	US-10-050-902-324	Sequence 324, App
8	211	100.0	124	US-10-050-902-324	Sequence 324, App
9	211	100.0	124	US-10-050-902-324	Sequence 324, App
10	211	100.0	124	US-10-050-902-324	Sequence 324, App
11	211	100.0	124	US-10-050-902-324	Sequence 324, App
12	211	100.0	124	US-10-050-902-324	Sequence 324, App
13	211	100.0	124	US-10-050-902-324	Sequence 324, App

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl
18	211	100.0	225	15	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, Appl
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, Appl
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, Appl
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl

ALIGNMENTS

RESULT 1
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Rissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebsek, Peter
TITLE OR INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 40
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 DB 52 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 91

RESULT 2
 US-10-050-898-348
 ; Sequence 348, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tissot, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Seibel, Peter
 ; APPLICANT: Piossek, Christine
 ; APPLICANT: Orlmann, Rainer
 ; APPLICANT: Luond, Rainer
 ; APPLICANT: Staufenbiel, Matthias
 ; APPLICANT: Frey, Peter
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190005
 ; CURRENT APPLICATION NUMBER: US/10/050, 898
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 348
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified human prion protein fragment
 ; US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
 Best Local Similarity 100.0%; Pred. No. 4.9e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 40
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 DB 52 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 91

RESULT 3
 US-10-346-190-89
 ; Sequence 89, Application US/10346190
 ; Publication No. US20030219459A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Pellisoli, Erica
 ; APPLICANT: Renner, Wolfgang A.
 ; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
 ; FILE REFERENCE: 1700.0290003
 ; CURRENT APPLICATION NUMBER: US/10/346,190
 ; PRIOR FILING DATE: 2003-01-17
 ; PRIOR APPLICATION NUMBER: 60/396,590
 ; PRIOR FILING DATE: 2002-07-18
 ; PRIOR APPLICATION NUMBER: 60/393,725
 ; PRIOR FILING DATE: 2002-07-08
 ; PRIOR APPLICATION NUMBER: 60/389,898
 ; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166
 ; PRIOR FILING DATE: 2002-01-21
 ; PRIOR APPLICATION NUMBER: 10/050,902
 ; PRIOR FILING DATE: 2002-01-18
 ; NUMBER OF SEQ ID NOS: 164
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 89
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified Human Prion Protein Fragment
 ; US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
 Best Local Similarity 100.0%; Pred. No. 4.9e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 4
 US-10-050-902-324
 ; Sequence 324, Application US/10050902
 ; Publication No. US20030175290A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tissot, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Seibel, Peter
 ; APPLICANT: Piossek, Christine
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190004
 ; CURRENT APPLICATION NUMBER: US/10/050,902
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 324
 ; LENGTH: 124
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: mPrPc construct
 ; US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
 Best Local Similarity 100.0%; Pred. No. 5.3e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 40
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 DB 53 NNFDVCNVTIKQHTVTTTGGNFETETDVKKMERVVEQ 92

RESULT 5
 US-10-050-898-324
 ; Sequence 324, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin

APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staendlel, Matchias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellietoli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/336,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luhrs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins, Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 82 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1el full length cDNA
FILE REFERENCE: HI-A0105

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/ CURRENT APPLICATION NUMBER: US/10/104,047
/ CURRENT FILING DATE: 2002-03-25
/ PRIOR APPLICATION NUMBER:
/ PRIOR FILING DATE:
/ NUMBER OF SEQ ID NOS: 4096
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 2013
/ LENGTH: 163
/ TYPE: PRN
/ ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match          100.0%; Score 211; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 122

RESULT 10
US-09-745-003-12
/ Sequence 12, Application US/09745003
/ Patent No. US20020042122A1
/ GENERAL INFORMATION:
/ APPLICANT: Bazan, Fernando J
/ TITLE OF INVENTION: Human proteins; Related Reagents
/ FILE REFERENCE: PRP2
/ CURRENT APPLICATION NUMBER: US/09/745,003
/ CURRENT FILING DATE: 2000-12-20
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 12
/ LENGTH: 164
/ TYPE: PRN
/ ORGANISM: rodent
US-09-745-003-12

Query Match          100.0%; Score 211; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 121

RESULT 11
US-10-470-848-10
/ Sequence 10, Application US/10470848
/ Publication No. US20040137421A1
/ GENERAL INFORMATION:
/ APPLICANT: President of Tohoku University
/ TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
/ FILE REFERENCE: PR-1224-PCT
/ CURRENT APPLICATION NUMBER: US/10/470,848
/ CURRENT FILING DATE: 2003-07-31
/ PRIOR APPLICATION NUMBER: JP 2001-24279
/ PRIOR FILING DATE: 2001-01-31
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 10
/ LENGTH: 200
/ TYPE: PRN
/ ORGANISM: Homo sapiens
US-10-470-848-10

Query Match          100.0%; Score 211; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9,5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
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DB 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 182

RESULT 12
US-10-470-848-3
/ Sequence 3, Application US/10470848
/ Publication No. US20040137421A1
/ GENERAL INFORMATION:
/ APPLICANT: President of Tohoku University
/ TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
/ FILE REFERENCE: PR-1224-PCT
/ CURRENT APPLICATION NUMBER: US/10/470,848
/ CURRENT FILING DATE: 2003-07-31
/ PRIOR APPLICATION NUMBER: JP 2001-24279
/ PRIOR FILING DATE: 2001-01-31
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 208
/ TYPE: PRN
/ ORGANISM: Homo sapiens
US-10-470-848-3

Query Match          100.0%; Score 211; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 13
US-10-745-393-1
/ Sequence 1, Application US/10745393
/ Publication No. US20040203131A1
/ GENERAL INFORMATION:
/ APPLICANT: Faatz, Elke
/ APPLICANT: Scholz, Christian
/ APPLICANT: Stock, Werner
/ APPLICANT: Schatzschmidt, Peter
/ TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
/ FILE REFERENCE: 12290 US3 (9793/141)
/ CURRENT APPLICATION NUMBER: US/10/745,393
/ CURRENT FILING DATE: 2003-12-23
/ PRIOR APPLICATION NUMBER: EP 0115225.3
/ PRIOR FILING DATE: 2001-06-22
/ PRIOR APPLICATION NUMBER: EP 01120939.2
/ PRIOR FILING DATE: 2001-08-31
/ PRIOR APPLICATION NUMBER: US 10/167,774
/ PRIOR FILING DATE: 2002-06-10
/ PRIOR APPLICATION NUMBER: US 10/179,905
/ PRIOR FILING DATE: 2002-06-24
/ NUMBER OF SEQ ID NOS: 3
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 1
/ LENGTH: 208
/ TYPE: PRN
/ ORGANISM: Homo sapiens
US-10-745-393-1

Query Match          100.0%; Score 211; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 14
```


US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

Search completed: December 3, 2004, 01:07:46
Job time : 47.3443 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Sequence: 1 NNQNNFVHDVCNITIKQHTV.....ENFTEDVAMERVQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: geneseqp1980s:*\n2: geneseqp1990s:*\n3: geneseqp2000s:*\n4: geneseqp2001s:*\n5: geneseqp2002s:*\n6: geneseqp2003as:*\n7: geneseqp2003bs:*\n8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	246	100.0	254	4	AAB72360 Hamster p
2	246	100.0	254	7	ADe06737 Chinese h
3	246	100.0	254	7	ADe06736 Armenian
4	245	99.6	253	4	AAB72350 Marmoset
5	241	98.0	124	5	ABG94340 Mouse mPr
6	241	98.0	124	5	ABG80652 Mouse trn
7	241	98.0	124	5	ADd24200 mPrPt-EK-
8	241	98.0	208	3	AAB07316 Mouse pri
9	241	98.0	208	3	AAB07327 Mouse pri
10	241	98.0	208	5	ABG31904 Chimera-t
11	241	98.0	208	7	ADJ66133 Mouse pri
12	241	98.0	209	5	ABG31905 HCHV cype
13	241	98.0	211	4	AAB30801 Amno aci
14	241	98.0	225	6	ABR42793 Rat prion
15	241	98.0	226	6	ADb85240 Rat prion
16	241	98.0	254	2	AAR86714 Mouse pri
17	241	98.0	254	2	AAW69659 Mouse pri
18	241	98.0	254	2	AAW85900 Mouse pri
19	241	98.0	254	2	AAV07996 Murine pr
20	241	98.0	254	4	AAB61772 Mouse pri
21	241	98.0	254	4	AAB82118 Murine pr
22	241	98.0	254	4	AAB82111 Murine pr
23	241	98.0	254	4	AAW84522 Amino aci
24	241	98.0	254	4	AAW65852 Mouse pri
25	241	98.0	254	5	AAW50888 Mouse pri

26	241	98.0	254	5	ABP51786 Mouse pri
27	241	98.0	254	5	ABG31906 Mouse pri
28	241	98.0	254	5	ABR04427 Murine pr
29	241	98.0	254	5	AAE15602 Mouse prP
30	241	98.0	254	5	AAE15609 Mouse prP
31	241	98.0	254	6	ABU58867 Mouse prP
32	241	98.0	254	6	AAE33226 Mouse prP
33	241	98.0	254	6	ABR42792 Mouse pri
34	241	98.0	254	7	ADCS9531 Mouse pri
35	241	98.0	254	7	ADCS2088 Mouse pri
36	241	98.0	254	7	ADD24194 Mouse pri
37	241	98.0	254	7	ADBS6264 Rat prote
38	241	98.0	254	7	ADBS6739 Mouse pri
39	241	98.0	254	8	ADP47774 Mouse pri
40	241	98.0	254	8	ADH44558 Murine pr
41	241	98.0	254	8	ADK15538 Murine pr
42	241	98.0	254	8	ADJ92128 Mouse pri
43	241	98.0	255	4	AAW72357 Murine pr
44	241	98.0	255	4	AAW72358 Murine pr
45	241	98.0	255	5	ABG31903 Chimera-t

ALIGNMENTS

2	RESULT 1	
AC	AAB72360 standard; peptide; 254 AA..	
AC	AAB72360;	
DT	17-MAY-2001 (first entry)	
DE	Hamster prion protein cellular form (PrPc) amino acid sequence.	
XX		
XX	Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;	
KM	prion disease; spongiform encephalopathies; Scrapie; hamster;	
KW	bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.	
OS	Criceulius sp.	
XX		
FH	Key Location/Qualifiers	
FT	Region 176..221	
XX	/note="stable region, specifically claimed in claim 3"	
XX		
PN	WO200107479-A2.	
PD	01-FEB-2001.	
XX		
PF	25-JUL-2000; 2000MO-GB002873.	
XX		
XX	27-JUL-1999; 99GB-00017491.	
PR	30-JUL-1999; 99GB-00017878.	
XX		
PA	(IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.	
XX		
PI	Collinge J, Clarke AR, Walthe JP, Jackson GS, Hosszu LLP;	
DR	WPI; 2001-168538/17.	
XX		
PT	New prion peptide for treating, preventing and/or diagnosing prion	
PT	diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in	
PT	cows and Creutzfeldt-Jakob disease in humans.	
XX		
PS	Claim 3; Fig 5; 69pp; English.	
XX		
CC	This invention relates to a peptide fragment of a cellular form of prion	
CC	protein PrPc located around a disulphide bond found in PrPc. The stable	
CC	structure is a specific marker of PrPc but not soluble prion protein	
CC	(PrPsc). The PrPc peptide sequences can be used to generate an antibody	
CC	or binding agent that binds PrPc. The antibody is used to detect or	
CC	remove PrPc, and may be used in preventative medicine. The antibody may	
CC	be used in the prevention, treatment or diagnosis of a prion disease,	

CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC hamster prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 CC
 CC Sequence 254 AA;
 CC
 CC Query Match 100.0%; Score 246; DB 4; Length 254;
 CC Best Local Similarity 100.0%; Pred. No. 9.2e-24;
 CC Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 CC 170 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 215
 CC
 CC RESULT 2
 CC ADE06737 standard; protein; 254 AA.
 CC ADE06737;
 CC 29-JAN-2004 (first entry)
 CC Chinese hamster prion protein SEQ ID NO:7.
 CC
 CC hybrid polypeptide; protein aggregation; prion polypeptide;
 CC neuroprotective; nootropic; antidiabetic; anticonvulsant;
 CC cerebroprotective; antiparkinsonian; cyostatic; nephroprotectic; cardiant;
 CC antiinflammatory; antiarteriosclerotic; gene therapy;
 CC Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 CC Alzheimer's disease; Type II diabetes; Huntington's disease;
 CC immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 CC amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 CC Frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 CC familial amyloidotic polyneuropathy; medullary carcinoma;
 CC chronic renal failure; congestive heart failure; chronic inflammation;
 CC atherosclerosis.
 CC
 CC Cricetus griseus.
 CC
 CC MO2003085086-A2.
 CC 16-OCT-2003.
 CC 08-APR-2003; 2003MO-US010856.
 CC 09-APR-2002; 2002US-0371610P.
 CC (SCRI) SCRIPPS RES INST.
 CC Burton DR, Williamson RA, Moroncini G;
 CC WPI; 2003-877028/81.
 CC
 CC New motif-grafted hybrid polypeptides binding to the infectious form of a
 CC prion, useful for diagnosing or treating diseases of protein aggregation
 CC or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 CC diabetes.
 CC
 CC Disclosure; SEQ ID NO 7, 115pp; English.
 CC
 CC The present invention describes a hybrid polypeptide (I) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associate conformer of the polypeptide; and
 CC (b) an additional amino acids from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also

CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a prpC form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC above; (5) a solid support comprising a plurality of polypeptides described
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idotype antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, nootropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cyostatic, nephroprotectic, cardiant,
 CC antiinflammatory and antiarteriosclerotic activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, Frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 CC
 CC Sequence 254 AA;
 CC
 CC Query Match 100.0%; Score 246; DB 7; Length 254;
 CC Best Local Similarity 100.0%; Pred. No. 9.2e-24;
 CC Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 CC 170 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 215
 CC
 CC RESULT 3
 CC ADE06736 standard; protein; 254 AA.
 CC ADE06736;
 CC 29-JAN-2004 (first entry)
 CC Armenian hamster prion protein SEQ ID NO:6.
 CC
 CC hybrid polypeptide; protein aggregation; prion polypeptide;
 CC neuroprotective; nootropic; antidiabetic; anticonvulsant;
 CC cerebroprotective; antiparkinsonian; cyostatic; nephroprotectic; cardiant;
 CC antiinflammatory; antiarteriosclerotic; gene therapy;
 CC Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 CC Alzheimer's disease; Type II diabetes; Huntington's disease;
 CC immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 CC amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 CC Frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 CC familial amyloidotic polyneuropathy; medullary carcinoma;
 CC chronic renal failure; congestive heart failure; chronic inflammation;
 CC atherosclerosis.
 CC
 CC Mesocricetus auratus.
 CC
 CC MO2003085086-A2.
 CC 16-OCT-2003.
 CC 08-APR-2003; 2003MO-US010856.
 CC 09-APR-2002; 2002US-0371610P.
 CC (SCRI) SCRIPPS RES INST.

XX PI Burton DR, Williamson RA, Moroncini G;
 XX MPI; 2003-877028/81.
 XX
 PT New motif-grafted hybrid polypeptides binding to the infectious form of a
 PT prion, useful for diagnosing or treating diseases of protein aggregation
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 PT diabetes.
 XX
 PS Disclosure; SEQ ID NO 6; 115bp; English.
 XX
 CC The present invention describes a hybrid polypeptide (1) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associated conformer of the polypeptide; and
 CC (b) an additional amino acids from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also
 CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a PrP^{Sc} form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC above; (5) a solid support comprising a plurality of polypeptides described
 CC above; (6) detecting cells that contain a protein conformer associated
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idiotypic antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, neurotropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cytostatic, nephroprotective, cardiant,
 CC antiinflammatory and antihypertensive activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 XX
 XX Sequence 254 AA:
 SO
 Query Match 100.0%; Score 246; DB 7; Length 254;
 Best Local Similarity 100.0%; Pred. No. 9.2e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 46
 ID AAB72350 standard; peptide: 253 AA.
 XX AAB72350;
 AC
 XX 17-MAY-2001 (first entry)
 DT
 XX Marmoset prion protein cellular form (PrPc) amino acid sequence.
 DE
 XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; marmoset;

KM bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 XX Callitrix jacchus.
 XX
 XX Key Location/Qualifiers
 FH Region 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 FT
 XX WO200107479-A2.
 XX
 XX 01-FEB-2001.
 XX
 XX 25-JUL-2000; 2000WO-GB002873.
 XX
 XX 27-JUL-1999; 99GB-00017491.
 XX 30-JUL-1999; 99GB-00017878.
 XX
 XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 XX Collinge J, Clarke AR, Waltho JP, Jackson GS, Hobszu LLP;
 PI
 DR MPI; 2001-168538/17.
 XX
 PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 PS Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrP^{Sc}). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,
 CC e.g. spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC marmoset prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 XX
 XX Sequence 253 AA:
 SO
 Query Match 99.6%; Score 245; DB 4; Length 253;
 Best Local Similarity 97.8%; Pred. No. 1.2e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 46
 ID AAB94340 standard; protein: 124 AA.
 XX AAB94340;
 AC
 XX 10-DEC-2002 (first entry)
 DT
 XX Mouse mPrPc protein.
 DE
 XX Human; mouse; rat; antimicrobial; anti-allergic; immunomodulatory;
 KM cytoprotective; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 XX Mus sp.
 OS
 XX WO200256905-A2.
 XX
 XX 25-JUL-2002.
 PD

21-JAN-2002; 2002MO-IB000166.
 19-JAN-2001; 2001US-0262379P.
 04-MAY-2001; 2001US-0288549P.
 05-OCT-2001; 2001US-0326598P.
 07-NOV-2001; 2001US-0331045P.
 (CYTO-) CYTOS BIOTECHNOLOGY AG.
 Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Seibel P, Plosek C;
 WPI; 2002-627351/67.
 Molecular antigen array used in the production of vaccines for infectious diseases.
 Disclosure; Page 438; 441pp; English.
 This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comprising a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an organiser comprising at least one first attachment site, where the organiser is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant Obea coat proteins having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytoskeletal, antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a protein sequence used to create the compositions of the invention
 Sequence 124 AA;
 Query Match 98.0%; Score 241; DB 5; Length 124;
 Best Local Similarity 97.8%; Pred. No. 1.8e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 1 NNONNFVHDCVNTTIRKQHTVTTTGGKGFETDVKMMERVAVQMCV 46
 :|||||
 50 SNONNFVHDCVNTTIRKQHTVTTTGGKGFETDVKMMERVAVQMCV 95
 RESULT 6
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 AC ABG80652;
 DT 29-NOV-2002 (first entry)
 XX Mouse truncated prion protein with C terminal cysteine containing linker.
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mitein;
 XX graft versus host disease; Igr-mediated allergic reaction; anaphylaxis;
 XX adult respiratory distress syndrome; ARDS; Crohn's disease;
 XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 XX Grave's disease; systemic lupus erythematosus; osteoporosis;
 XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 XX immunoproliferative disease lymphadenopathy; Alzheimer's disease;

angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 enterokinase; cysteine-containing linker.
 Mus sp.
 OS Synthetic.
 PN WO200256907-A2.
 PD 25-JUL-2002.
 21-JAN-2002; 2002MO-IB000166.
 19-JAN-2001; 2001US-0262379P.
 04-MAY-2001; 2001US-0288549P.
 05-OCT-2001; 2001US-0326598P.
 07-NOV-2001; 2001US-0331045P.
 (CYTO-) CYTOS BIOTECHNOLOGY AG.
 (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUDS/) LUDSCH R.
 PA (STAU/) STAUENBIEL M.
 PA (FREY/) FREY P.
 PI Maurer P, Lechner F, Ortmann R, Luedend R, Straufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tiesot A, Seibel P, Plosek C;
 WPI; 2002-636514/68.
 Molecular antigen array used in the production of vaccines for infectious diseases.
 Example 7; Page 415; 418pp; English.
 The invention relates to a composition comprising: (a) a non-natural molecular scaffold comprising: (1) a core particle selected from: (1) a core particle of a non-natural origin; and (2) a core particle of natural origin; and (1) an organiser comprising at least one first attachment site, where the organiser is connected to the core particle by at least one covalent bond; (b) an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta 1-42) or its fragment, and where the second attachment site is selected from: (1) an attachment site not naturally occurring with the antigen or antigenic determinant; and (1) an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. CC Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in CC immunisation and as a vaccine for diseases such as influenza, graft CC versus host disease, Igr-mediated allergic reactions, anaphylaxis, adult CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease, CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia CC gravis, immunoproliferative disease lymphadenopathy, CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, CC osteoporosis and infectious diseases. The present sequence is a modified CC antigen for use in the array of the invention. The antigen is modified to CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine- CC containing N- or C-terminal linker peptide which serves as the attachment CC point to a virus like particle or bacterial protein (the scaffold CC protein)
 Sequence 124 AA;
 Query Match 98.0%; Score 241; DB 5; Length 124;
 Best Local Similarity 97.8%; Pred. No. 1.8e-23;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
:|||||
50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

RESULT 7
ADD24200
ID ADD24200 standard; protein; 124 AA.

AC ADD24200;

DT 15-JAN-2004 (first entry)

DE mPrP-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;

KM first attachment site; antigen; antigenic determinant; prion protein;

KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

KM prion disease; Bovine Spongiform Encephalopathy; BSE;

KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.

OS Unidentified.

OS prion.

PN MO2003059386-A2.

PD 24-JUL-2003;

PF 17-JAN-2003; 2003MO-EP000460.

PR 18-JAN-2002; 2002US-00050902.

PR 21-JAN-2002; 2002MO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PI Bechmann M, Maurer P, Pelliccioli E, Renner WA;

DR WPI; 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.

PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage) and at least one prion protein or peptide bound to the virus-like

PT particle.

XX Example 13; SEQ ID NO 93; 246bp; English.

XX This invention relates to a novel vaccine composition comprising a virus-

CC like or a core particle with at least one first attachment site and at

CC least one antigen or antigenic determinant that is a prion protein (PrP)

CC or its dimer, or a PrP peptide, the antigen or antigenic determinant

CC being bound to the virus-like or core particle. The vaccine of the

CC invention may have neuroprotective or antiinflammatory activity. The

CC composition is useful as a medicament or in manufacturing a medicament

CC for the treatment or prevention of prion diseases. The prion diseases may

CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob

CC Disease. The present sequence is the amino acid sequence of the cleaved

CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)

CC which was used during the exemplification of the invention.

XX Sequence 124 AA;

SO Query Match 98.0%; Score 241; DB 7; Length 124;

Best Local Similarity 97.8%; Pred. No. 1.8e-23;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 8
AAB07316
ID AAB07316 standard; protein; 208 AA.

AC AAB07316;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

XX Mouse; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

OS Mus sp.

XX Key Location/Qualifiers

FT Region 37..68

FT /note= "Repeat region consisting of tandem repeats of

FT repeat unit: PHGGGMCQ (AAB07319)"

FT Disulfide-bond 156..191

FT Modified-site 208

FT /note= "C-terminal phospho-inositol glycolipid membrane

FT anchor (-GPI)"

XX MO200029850-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99MO-FI000897.

XX 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

PA (BBSR-) BBSRC OFFICE.

PI Hope J, Barnard GJR, Birkett CR;

DR WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of

PT transmissible spongiform encephalopathies in bovine.

XX Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,

CC insoluble isoform is implicated in the pathogenesis of Transmissible

CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob Disease (CJD)

CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay

CC of the present invention, in which a PrP epitope is captured by an

CC antibody, which is then detected. The presence of PrP indicates TSE. PrP

CC epitopes (AAB07320-B07326) are derived from the protease resistant core

CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

SO Query Match 98.0%; Score 241; DB 3; Length 208;

Best Local Similarity 97.8%; Pred. No. 3.3e-23;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 9
AAB07327
ID AAB07327 standard; protein; 208 AA.

AC AAB07327;

DT 147 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 192

XX 17-OCT-2000 (first entry)
XX Mouse prion protein sequence.
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond repeat unit: PHGGGWGQ (AAB07319)"
XX Modified-site 156..191
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO20029849-A1.
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000896.
XX
XX 17-NOV-1998; 98FI-00002480.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
XX transmissible spongiform encephalopathies in mammals, comprises specific
XX capture antibody.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an assay
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
SQ
Query Match 98.0%; Score 241; DB 3; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
DB 147 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCV 192
RESULT 10
ABG31904
ID ABG31904 standard; protein; 208 AA.
XX
XX ABG31904;
AC
XX
XX 05-NOV-2002 (first entry)
DT
XX
XX Chimera-type prion protein #2.
DE
XX

KW Prion; follicular dendritic cells; FDC; infection; blood preparation;
KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
XX Synthetic.
XX
XX WO200261418-A1.
XX
XX 08-AUG-2002.
XX
XX 31-JAN-2002; 2002WO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO) UNITI TOROKU.
XX
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Claim 9; Page 55-57; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a chimeric type prion related protein of the
XX invention
XX
XX Sequence 208 AA;
SQ
Query Match 98.0%; Score 241; DB 5; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
DB 148 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMCV 193
RESULT 11
ADJ6133
ID ADJ6133 standard; protein; 208 AA.
XX
XX ADJ6133;
AC
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Mouse prion protein, PrP.
DE
XX
XX Prion protein; detection; mouse; PrP.
KM
XX
XX Mus sp.
OS
XX
XX JP2003130880-A.
PN
XX
XX 08-MAY-2003.
PD
XX
XX 29-OCT-2001; 2001JP-00330696.
BP
XX
XX 29-OCT-2001; 2001JP-00330696.
PR
XX
XX (FJRE) FUJIREBIO KK.
PA
XX
XX WPI; 2003-639503/61.
DR
XX
XX N-PSDB; ADJ6131.

XX Reagent for detecting abnormal prion protein in sample, comprises
PT denaturant treated antibody or its Fab fragment that specifically reacts
PT with antigen in prion protein, immobilized on magnetic particle.
XX
XX Disclosure; SEQ ID NO 1; 99p; Japanese.
XX
CC The present invention relates to a reagent (1) for detecting abnormal
CC prion protein, comprising an antibody or its Fab fragment that
CC specifically reacts with an antigen in the prion protein, immobilized on
CC a magnetic particle, where the antibody or its fragment is treated with a
CC denaturant. (1) enables highly-sensitive detection of abnormal prion
CC protein can in a sample, within a short time, and without performing
CC electrophoresis and centrifugation procedures which is time-consuming.
CC The present sequence is a mouse prion protein (PrP), used to illustrate
CC the invention.
XX
XX Sequence 208 AA;
SQ
Query Match 98.0%; Score 241; DB 7; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
:|||||
Db 149 SNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 192
RESULT 12
ABG31905
ID ABG31905 standard; protein; 209 AA.
XX
XX ABG31905;
AC
XX 05-NOV-2002 (first entry)
DT
XX
XX HCHV type prion protein.
DE
XX Prion; follicular dendritic cells; FDC; infection; blood preparation;
XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
XX Synthetic.
OS
XX WO200261418-A1.
XX
XX 08-AUG-2002.
PD
XX
XX 31-JAN-2002; 2002MO-JP000803.
PF
XX
XX 31-JAN-2001; 2001JP-00024279.
PR
XX
XX (TOHO) UNIV TOHOKU.
PA
XX
XX Kitamoto T, Miyoshi K, Mohri S;
PI
XX
XX WPI; 2002-619277/66.
DR
XX
XX Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
PT indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Claim 9; Page 57-58; 69p; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a Chv type prion related protein of the
CC invention

XX Sequence 209 AA;
SQ
Query Match 98.0%; Score 241; DB 5; Length 209;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
:|||||
Db 148 SNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 193
RESULT 13
AAB30801
ID AAB30801 standard; protein; 211 AA.
XX
XX AAB30801;
AC
XX
XX 02-APR-2001 (first entry)
DT
XX
XX Amino acid sequence of a mouse prion protein.
DE
XX
XX SCHAG; self-coalesce; higher-order aggregate; amyloidogenic domain;
XX aggregation; fibril; phenotypic alteration; gene therapy;
XX disease resistance; plant pigmentation; prion disease.
XX
XX Mus sp.
OS
XX
XX WO200075324-A2.
XX
XX 14-DEC-2000.
PD
XX
XX 09-JUN-2000; 2000MO-US015876.
PF
XX
XX 09-JUN-1999; 99US-0138833P.
PR
XX
XX (ARCH-) ARCH DEV CORP.
PA
XX
XX Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;
PI
XX
XX WPI; 2001-061723/07.
DR
XX
XX N-FSDB; AAC86686.
DR
XX
XX New nucleic acid encoding chimeric proteins with self-assembly
PT properties, useful e.g. for diagnosis and treatment of prion diseases,
PT also related aggregates, fibrils and polymers.
XX
XX Claim 11; Page 137-138; 188p; English.
XX
XX The present sequence represents a prion protein. The specification
CC describes chimeric polypeptides, which comprise at least one SCHAG (self-
CC coalesce into higher-order aggregates) amino acid sequence fused in
CC frame with a polypeptide of interest (which is other than a marker
CC protein), a glutathione-S-transferase or a staphylococcal nuclear
CC protein). The specification also describes chimeric polypeptides that
CC comprises an amyloidogenic domain that causes aggregation into fibrils.
CC The chimeric polypeptides are used to prepare polymers with multiple
CC reactivities, e.g. derivatised with enzymes, or specific binding
CC partners, and useful e.g. for performing multi-step chemical reactions.
CC They can be used create an inducible, or stable phenotypic alteration in
CC a cell, e.g. for gene therapy, protein production, imparting disease
CC resistance to plants, altering plant pigmentation and for diagnosis and
CC treatment of prion diseases
XX
XX Sequence 211 AA;
SQ
Query Match 98.0%; Score 241; DB 4; Length 211;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
:|||||
Db 149 SNQNNFVHDCVNTIKQHTVTTTGGKGFETDVKMERVVEQMCV 194

RESULT 14
ABR42793
ID ABR42793 standard; protein; 225 AA.
XX ABR42793;
AC ABR42793;
XX 08-SEP-2003 (first entry)
XX
XX
DE Rat prion protein.
XX
XX Rat; prion protein; prionosis; neurotropic; neuroprotective; immunogen;
XX vaccine.
XX
XX Rattus sp.
XX
XX WO2003045128-A2.
XX
XX 05-JUN-2003.
XX
XX 21-NOV-2002; 2002WO-US037634.
XX
XX 21-NOV-2001; 2001US-0331801P.
XX
XX (UYNV) UNITV NEW YORK STATE.
XX
XX Frangione B, Wisniewski T, Sigurdsson EM;
XX WPI; 2003-505145/47.
XX
XX New synthetic immunogenic but non-deposit forming peptides, useful for
XX inducing an immune response to prions, amyloids, amylin or amylin
XX fibrils, particularly for treating e.g. Alzheimer's, scrapie or
XX Creutzfeldt-Jacob disease.
XX
XX Disclosure; Page 228-229; 265pp; English.
XX
XX The present sequence is the amino acid sequence of rat prion protein. The
XX invention provides a synthetic immunogenic but non-deposit-forming
XX polypeptide that is homologous to human (see ABR42789) or bovine (see
XX ABR42798) prion protein. Such peptides, alone or conjugated to an
XX immunostimulant, are used to induce an immune response to prion, and
XX immunizing compositions comprising the peptides are used in a claimed
XX method for inducing an immune response to hsp and prion deposits.
XX Antibodies directed against the peptides can be used in passive
XX immunization
XX
XX Sequence 225 AA;
SQ

Query Match 98.0%; Score 241; DB 6; Length 225;
Best Local Similarity 97.8%; Pred. No. 3.6e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGTGKGFETDVKMERVVEQMCV 46
:|||||
DB 142 SNQNNFVHDCVNITIKQHTVTTTGTGKGFETDVKMERVVEQMCV 187

RESULT 15
ADB85240
ID ADB85240 standard; protein; 226 AA.
XX
XX ADB85240;
AC ADB85240;
XX
XX 04-DEC-2003 (first entry)
XX
XX Rat prion-related protein SEQ ID NO:121.
XX
XX Rat; streptozocin; kinase; phosphatase; ion channel protein; receptor;
XX transporter; G-protein coupled receptor; GPCR; DNA-binding proteins;
XX protease; enzyme; analgesic; gene therapy; pain; diabetes.
XX

OS Rattus norvegicus.
XX
XX EPI284297-A2.
XX
XX 19-FEB-2003.
XX
XX 26-JUL-2002; 2002EP-00255228.
XX
XX 27-JUL-2001; 2001GB-00018354.
XX
XX 07-FEB-2002; 2002GB-00002880.
XX
XX (WARN) WARNER LAMBERT CO.
XX
XX Brooksbank RA, Dixon AK, Lee K, Pinnock RD;
XX
XX WPI; 2003-364994/35.
XX
XX N-PSDB; ADB85241.
XX
XX Use of gene sequence that is down-regulated in response to streptozocin-
XX induced diabetes, vector, host cell, animal, polypeptide and antibody, in
XX screening of compounds for treating or diagnosing pain.
XX
XX Disclosure; Page 190; 256pp; English.
XX
XX The invention relates to a novel isolated gene sequence that is down-
XX regulated in the spinal cord in response to streptozocin-induced
XX diabetes, or comprising, hybridizing or having at least 80% sequence
XX identity to a sequence whose expression products are kinases,
XX phosphatases, ion channel proteins, receptors, transporters, G-protein
XX coupled receptor proteins, DNA-binding proteins, proteases or enzymes,
XX given in the specification. A gene of the invention has analgesic
XX activity, and may have a use in gene therapy. The gene sequences, vector,
XX host cell, animal, polypeptide and antibody are useful for screening of
XX compounds for diagnosing or treating pain. The kits are useful for
XX simultaneous, separate or sequential detecting and/or quantifying down-
XX regulation of a gene sequence in the spinal cord of a mammal in response
XX to streptozocin-induced diabetes. The compound or pharmaceutical
XX composition is useful as a medicament for treating or diagnosing pain.
XX The present sequence represents a protein encoded by a gene of the
XX invention.
XX
XX Sequence 226 AA;
SQ

Query Match 98.0%; Score 241; DB 7; Length 226;
Best Local Similarity 97.8%; Pred. No. 3.6e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGTGKGFETDVKMERVVEQMCV 46
:|||||
DB 142 SNQNNFVHDCVNITIKQHTVTTTGTGKGFETDVKMERVVEQMCV 187

Search completed: December 3, 2004, 00:55:40
Job time : 77.1639 secs

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	246	100.0	254	B34759	prion protein - go
2	246	100.0	254	A34759	prion protein - Ch
3	245	99.6	232	S71041	major prion protei
4	241	98.0	226	A53892	prion-related prot
5	241	98.0	254	A23544	major prion protei
6	240	97.6	241	S71048	major prion protei
7	240	97.6	241	S71056	major prion protei
8	240	97.6	245	S71045	major prion protei
9	240	97.6	252	S53634	major prion protei
10	240	97.6	253	1 UHU	major prion protei
11	240	97.6	253	184423	major prion protei
12	240	97.6	253	S71052	major prion protei
13	240	97.6	253	137032	major prion protei
14	239	97.2	252	161848	major prion protei
15	239	96.7	264	S71137	prion protein - gr
16	237	96.3	254	1 UHY1H	major prion PrP-Sc
17	237	96.3	257	A23545	major prion prf27-
18	235	95.5	245	S53627	major prion protei
19	235	95.5	252	S53631	major prion protei
20	235	95.5	253	S53624	major prion protei
21	235	95.5	253	S53623	major prion protei
22	235	95.5	253	S53620	major prion protei
23	235	95.5	253	S53625	major prion protei
24	235	95.5	253	S53635	prion protein - si
25	235	95.5	253	S53614	major prion protei
26	235	95.5	253	161847	major prion protei
27	235	95.5	253	S53616	major prion protei
28	235	95.5	253	S53618	major prion protei
29	235	95.5	253	S53619	major prion protei

30	235	95.5	256	2	JU0268	major prion protei
31	235	95.5	264	2	A54330	major prion protei
32	234	95.1	256	2	S37149	prion protein - go
33	234	95.1	256	2	A54281	major prion protei
34	234	95.1	260	2	S53629	major prion protei
35	233	94.7	257	2	JQ1900	major prion protei
36	231	93.9	239	2	S53633	major prion protei
37	230	93.5	253	2	S53617	major prion protei
38	229	93.1	252	2	JC6175	prion protein - ra
39	229	93.1	267	2	A37372	prion protein homo
40	78	31.3	267	1	UCH	major prion protei
41	77	31.3	273	2	A46280	prion protein - ch
42	64	26.0	139	2	H90004	hypothetical prote
43	61.5	25.0	533	1	D71338	probable ribose/ga
44	60.5	24.6	182	2	A10130	conserved hypothe
45	59	24.0	346	2	B71496	cryptophan-tRNA 11

ALIGNMENTS

RESULT 1
B34759
prion protein - golden hamster
C:Species: Mesocricetus auratus (golden hamster)
C>Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell. Biol. 10, 1153-1163, 1990
A>Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:g191182; PIDN:AAA37014.1; PID:g191183
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 246; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTKGENFTEDVKMERVVEQMCV 46
DB 170 NNQNNFVHDCVNITIKQHTVTTTKGENFTEDVKMERVVEQMCV 215

RESULT 2

A34759
prion protein - Chinese hamster
C:Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell. Biol. 10, 1153-1163, 1990
A>Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 246; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTKGENFTEDVKMERVVEQMCV 46
DB 170 NNQNNFVHDCVNITIKQHTVTTTKGENFTEDVKMERVVEQMCV 215

RESULT 3

S71041

major prion protein - black-handed spider monkey (fragment)

C/Species: Ateltes Geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDD:AA05097.1; PID:G4743

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53630; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCW>

A/Cross-references: EMBL:U08309

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 99.6%; Score 245; DB 2; Length 232;

Best Local Similarity 97.8%; Pred. No. 1.2e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46

154 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 199

RESULT 4

A53892

prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lhm, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; MUID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDD:AAA1947.1; PID:G206392

C/Suprafamily: major prion protein

Query Match 98.0%; Score 241; DB 2; Length 226;

Best Local Similarity 97.8%; Pred. No. 3.7e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46

142 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 187

RESULT 5

A23544

major prion protein precursor - mouse

N/Alternate names: PrP, Scrapie prion

C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A23544; MUID:88052869; PMID:2890436

A/Accession: A23544

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 241;

Best Local Similarity 95.7%; Pred. No. 5.2e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

1 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDD:AAA3997.1; PID:G200529

A/Experimental source: strain NZM and I/LmJ

A/Note: the sequence shown is from the NZM strain; the sequence from the I/LmJ strain did

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Mulhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain at

A/Reference number: S02521; MUID:88166695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur

A/Reference number: A22315; MUID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHE>

C/Suprafamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl

F1-22/Domain: signal sequence #status predicted <SIG>

F1-23-331/Product: major prion protein #status predicted <MAT>

F1-232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F1-178-213/Disulfide bonds: #status predicted

F1-180, 196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F1-231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 98.0%; Score 241; DB 2; Length 254;

Best Local Similarity 97.8%; Pred. No. 4.2e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46

169 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 214

RESULT 6

S71048

major prion protein - Callithrix jacchus (fragment)

C/Species: Callithrix jacchus

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDD:AA050100.1; PID:G47558

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53614

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 241;

Best Local Similarity 95.7%; Pred. No. 5.2e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

1 NNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46

Db 163 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 7

S71056

major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AACS0091.1; PID:G4743

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 241;
Best Local Similarity 95.7%; Pred. No. 5, 2e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 163 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 208

RESULT 8

S71045

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AACS0081.1; PID:G4743

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 245;
Best Local Similarity 95.7%; Pred. No. 5, 3e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 162 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 9

S53634

major prion protein - common marmoset

C/Species: Callithrix jacchus (common marmoset)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53634; S71047

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53634

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-252 <SCH>

A/Cross-references: UNIPROT:P40247; EMBL:U08304

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71047

A/Molecule type: DNA

A/Residues: 1-209, 'E', 211-252 <SCW>

A/Cross-references: EMBL:U08304; NID:G474366; PIDN:AACS0092.1; PID:G474367

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 252;
Best Local Similarity 95.7%; Pred. No. 5, 5e-22;
Matches 44; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 169 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQWCI 214

RESULT 10

UJHU

major prion protein precursor - human

N/Alternate names: 11k amyloid protein; 27-30k sialoglycoprotein; PrP 27-30; PrP 33-35C;

C/Species: Homo sapiens (man)

C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C/Accession: A24173; A40372; A05017; S14078; I54322; I58597; I59184; I79633; I796

R/Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Studdibline, W.H.; Prusiner, S.B.; De

DNA 5, 315-324, 1986

A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173

A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PIDN:AAA60182.1; PID:G190468

R/Puckett, C.; Concannon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:9132813; PMID:1678248

A/Accession: A40372

A/Status: not compared with conceptual translation

A/Molecule type: DNA

A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G747846; PIDN:CA58442.1; PID:G747847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

R/Liao, Y.C.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 364-367, 1986

A/Reference number: A05017; MUID:86261778; PMID:3014653

A/Accession: A05017

A/Molecule type: mRNA

A/Residues: 8-117, 119-253 <LIA>

A/Cross-references: GB:U00015; NID:G220015; PIDN:BA40011.1; PID:G220016; GB:M13667; NID

R/Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow

EMBO J. 10, 513-519, 1991

A/Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is

A/Accession: S14078; MUID:91160504; PMID:1672107

A/Molecule type: protein

A/Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>

R/Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.

Hum. Mol. Genet. 1, 443-444, 1992

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A>Title: Prio protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210,'R',212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08307; NID:g474372; PIDN:AC50095.1; PID:g474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          97.6%; Score 240; DB 2; Length 253;
Best Local Similarity 95.7%; Pred. No. 5.5e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Oy      1  NNQNNFVHDCVNTTIKQHTVTTTGGENFTEDVKKMERVVEQMCV 46
      :|||||
Db      170  SNQNNFVHDCVNTTIKQHTVTTTGGENFTEDVKKMERVVEQMC 215

A>Title: Prio protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210,'R',212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08307; NID:g474372; PIDN:AC50094.1; PID:g474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          97.6%; Score 240; DB 2; Length 253;
Best Local Similarity 95.7%; Pred. No. 5.5e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Oy      1  NNQNNFVHDCVNTTIKQHTVTTTGGENFTEDVKKMERVVEQMCV 46
      :|||||
Db      170  SNQNNFVHDCVNTTIKQHTVTTTGGENFTEDVKKMERVVEQMC 215

A>Title: Infectious amyloid precursor gene sequences in primates used for experimental transgenic mice.
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I37032
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNITIKQHTV.....ENFTETDYKMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02: *
1: uniprot_sprot: *
2: uniprot_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	246	100.0	240	Q8VHV4	Q8VHV4 microtus ag
2	246	100.0	248	Q8VHV5	Q8VHV5 clethrionom
3	246	100.0	254	PRIO_CRIGR	Q60506 cricetulus
4	246	100.0	254	PRIO_CRIMI	Q60468 cricetulus
5	246	100.0	254	PRIO_SIGHI	Q920C3 sigmodon hi
6	246	100.0	254	Q920T4	Q920T4 sigmodon fu
7	245	99.6	232	PRIO_ATEGE	P40246 acetes geof
8	245	99.6	252	PRIO_CALJA	P40247 callithrix
9	243	98.8	215	Q811W3	Q811W3 spalax leuc
10	243	98.8	224	Q811W4	Q811W4 spalax leuc
11	243	98.8	250	Q866V8	Q866V8 manis sp. p
12	241	98.0	253	Q920T5	Q920T5 meriones un
13	241	98.0	254	PRIO_MOUSE	P04925 mus musculu
14	241	98.0	254	PRIO_RAT	P13852 rattus norv
15	241	98.0	254	Q8VHV6	Q8VHV6 apodemus sy
16	241	98.0	254	AAD1993	AAD1993 rattus no
17	240	97.6	220	Q866W7	Q866W7 ochotona pr
18	240	97.6	238	PRIO_CERAT	Q95145 cercocebus
19	240	97.6	238	PRIO_THEGE	Q95270 theropithec
20	240	97.6	238	Q86XR1	Q86XR1 homo sapien
21	240	97.6	241	PRIO_CALMO	P40248 callithecub
22	240	97.6	241	PRIO_MANSP	P40255 mandrillus
23	240	97.6	245	PRIO_CERAB	P40256 cercopithec
24	240	97.6	246	PRIO_CERNO	P61762 cercopithec
25	240	97.6	246	PRIO_CERNE	P61762 cercopithec
26	240	97.6	246	PRIO_CERNO	Q95176 cercocebus
27	240	97.6	246	PRIO_ERYPA	Q95174 erythrocebu
28	240	97.6	246	AAO83636	AAO83636 homo sapi
29	240	97.6	252	PRIO_CEBAP	P40249 cebus apell
30	240	97.6	253	PRIO_COICU	P40251 colobus gue
31	240	97.6	253	PRIO_GORCO	P40252 gorilla gor

32	240	97.6	253	1	PRIO_HUMAN	P04156 homo sapien
33	240	97.6	253	1	PRIO_MACFA	P40254 macaca fasc
34	240	97.6	253	1	PRIO_PONPY	P40256 pongo pygma
35	240	97.6	253	1	PRIO_PPRFR	P40257 prebythia f
36	240	97.6	253	2	Q6TGR8	Q6TGR8 homo sapien
37	240	97.6	253	2	Q6UL99	Q6J199 macaca mula
38	240	97.6	253	2	AA880162	AA880162 homo sapi
39	240	97.6	253	2	AA812192	AA812192 macaca mu
40	240	97.6	277	2	Q6SE81	Q6SE81 homo sapien
41	240	97.6	277	2	AA821603	AA821603 homo sapi
42	240	97.6	285	2	Q75942	Q75942 homo sapien
43	239	97.2	248	2	Q866V6	Q866V6 diceros bic
44	239	97.2	252	1	PRIO_ATEPA	P51446 ateles panl
45	239	97.2	260	1	PRIO_SAISC	P40258 saimiri sci

ALIGNMENTS

RESULT 1									
ID	Q8VHV4	PRELIMINARY;	PRT;	240 AA.					
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DT	01-MAR-2002 (TREMBlrel. 20, Created)								
DT	01-MAR-2002 (TREMBlrel. 20, Last sequence update)								
DT	01-JUN-2003 (TREMBlrel. 24, Last annotation update)								
DE	Prion protein (Fragment).								
GN	Name=PrP;								
OS	Microtus agrestis (Short-tailed field vole).								
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;								
OC	Microtus.								
OX	NCBI_TaxID=29092;								
RN	[1]								
RP	SEQUENCE FROM N.A.								
RA	Delli'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,								
RA	Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;								
RU	Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.								
CC	-1- SIMILARITY: Belongs to the prion family.								
DR	EMBL; AF367625; AAU57232.1; -								
DR	InterPro; IPR000817; Prion.								
DR	Pfam; PF00377; Prion, 1.								
DR	Pfam; PF03991; Prion octapep; 6.								
DR	PRINTS; PR00341; PRION.								
DR	SMART; SM00157; PRP; 1.								
DR	PROSITE; PS00291; PRION_1; 1.								
DR	PROSITE; PS00706; PRION_2; 1.								
KW	Prion.								
FT	NON_TER	1	1						
FT	NON_TER	240	240						
SQ	SEQUENCE	240 AA;	26308 MW;	BCA4EDJ3F5F76693 CRC64;					
Query Match		100.0%;	Score 246;	DB 2;	Length 240;				
Best Local Similarity		100.0%;	Pred. No. 1.1e-22;						
Matches	46;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;
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CC Clathrinome.
CC NCBI_TaxID=51090;
CC [1]
CC SEQUENCE FROM N.A.
CC RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
CC Di Garbo G., Kretschmar H.A., Wolfer D.P., Lippe H.P.,
CC Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
CC DR EMBL: AF367624; AL57231.1;
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; Prion; 1.
CC DR PRINTS: PR00341; Prion.
CC DR SMART: SM00157; PRP; 1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KM Prion.
CC SQ NON TER 248 248
CC SEQUENCE 248 AA; 27259 MW; 81564ECD2773C2C CRC64;

Query Match 100.0%; Score 246; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. No. 1,1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCV 46
DB 170 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCV 215

RESULT 3
PRIO_CRICR STANDARD; PRT; 254 AA.
AC 060506;
DT 15-JUL-1998 (Rel. 36, Created)
DT 05-JUL-1998 (Rel. 36, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cricetus griseus (Chinese hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetulus.
OC NCBI_TaxID=10029;
OC [1]
OC SEQUENCE FROM N.A.
OC TISSUE=Brain;
OC MEDLINE=90158578; PubMed=2406562;
OC Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
OC DeArmond S.J., Prusiner S.B.;
OC "Three hamster species with different scrapie incubation times and
OC neuropathological features encode distinct prion proteins.";
OC Mol. Cell. Biol. 10:1153-1163(1990).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rinds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: M33958; AAA37013.1; -.

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DR PIR: A34759; A34759.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; Prion.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 231
FT PROPEP 232 254
FT LIPID 231 231
FT DOMAIN 90 231
FT CARBOHYD 181 181
FT CARBOHYD 197 197
FT DISULFID 179 214
FT DOMAIN 51 91
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 84 91
SQ SEQUENCE 254 AA; 27823 MW; 6299CA00E8B607D CRC64;

Query Match 100.0%; Score 246; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1,2e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCV 46
DB 170 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCV 215

RESULT 4
PRIO_CRIMI STANDARD; PRT; 254 AA.
AC 060468;
DT 15-JUL-1998 (Rel. 36, Created)
DT 05-JUL-1998 (Rel. 36, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetulus.
OC NCBI_TaxID=10032;
OC [1]
OC SEQUENCE FROM N.A.
OC TISSUE=Brain;
OC MEDLINE=90158578; PubMed=2406562;
OC Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
OC DeArmond S.J., Prusiner S.B.;
OC "Three hamster species with different scrapie incubation times and
OC neuropathological features encode distinct prion proteins.";
OC Mol. Cell. Biol. 10:1153-1163(1990).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rinds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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EMBL, M33959; AAA37014.1; -
HSSP; P04925; IAG2.
InterPro; IPR000817; Prion.
Pfam; PF003377; Prion; 1.
PRINTS; PR00341; PRION.
PROSITE; PS00291; PRION_1; 1.
PROSITE; PS00706; PRION_2; 1.
Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CHAIN 1 22
By similarity.
PROPEP 23 231
Major prion protein.
LIPID 231 231
Removed in mature form.
DOMAIN 90 231
PRP27-30 (PROTEASE RESISTANT CORE).
CARBOHYD 181 181
N-linked (GlcNAc...) (By similarity).
DISULFID 179 214
By similarity.
DOMAIN 51 91
5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
REPEAT 51 59
1.
REPEAT 60 67
2.
REPEAT 68 75
3.
REPEAT 76 83
4.
REPEAT 84 91
5.
SEQUENCE 254 AA; 27855 MW; 7b963f6c6f77f9d0f CRC64;

Query Match 100.0%; Score 246; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
Db 170 NNONNFVHDCVNTIKQHTVTTTGGNFETDVKKMERVVEQMCV 215

RESULT 5
ID PRIOR_SIGHI STANDARD; PRT; 254 AA.
AC Q92073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=PRNP; Synonyms=PRP;
OS Sigmmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=42415;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
Schwarz T.F., Werner T., Scharzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
"fodes".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
animals infected with the degenerative neurological diseases kuru,
Creutzfeldt-jakob disease (CJD), Gerstmann-Strausler syndrome
(GSS), scrapie, bovine spongiform encephalopathy (BSE),
transmissible mink encephalopathy (TME), etc.

-1- SIMILARITY: Belongs to the prion family.

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EMBL; AF117325; AAD19996.1; -
HSSP; P04925; IAG2.
InterPro; IPR000817; Prion.
Pfam; PF003377; Prion; 1.
PRINTS; PR00341; PRION.
PROSITE; PS00291; PRION_1; 1.
PROSITE; PS00706; PRION_2; 1.
Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
Signal.
CHAIN 1 22
By similarity.
PROPEP 23 231
Major prion protein.
LIPID 231 231
Removed in mature form (By similarity).
DOMAIN 51 91
5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
REPEAT 51 59
1.
REPEAT 60 67
2.
REPEAT 68 75
3.
REPEAT 76 83
4.
REPEAT 84 91
5.
FT CARBOHYD 181 181
N-linked (GlcNAc...) (Potential).
FT DISULFID 179 214
By similarity.
FT LIPID 231 231
GPI-anchor amidated serine (By similarity).
FT CARBOHYD 181 181
N-linked (GlcNAc...) (Potential).
FT FT 197 197
SEQUENCE 254 AA; 27874 MW; 50c464d51b572df CRC64;

Query Match 100.0%; Score 246; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.2e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
Db 170 NNONNFVHDCVNTIKQHTVTTTGGNFETDVKKMERVVEQMCV 215

RESULT 6
ID Q92074 PRELIMINARY; PRT; 254 AA.
AC Q92074;
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Sigmmodon fulviventer (tawny-bellied cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmmodon.
OX NCBI_TaxID=69246;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
Schwarz T.F., Werner T., Scharzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
CC EMBL; AF117324; AAD19995.1; -
CC InterPro; IPR000817; Prion.
CC Pfam; PF003377; Prion; 1.

DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 254 254
 SQ SEQUENCE 254 AA; 27904 MW; 9EE7E1D106B43B97 CRC64;
 Query Match 100.0%; Score 246; DB 2; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1.2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNNNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCV 46
 Db 170 NNNNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCV 215

RESULT 7
 ID PRT; 232 AA.
 AC P40246;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Ateles geoffroyi (Black-handed spider monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
 OX NCBI_TaxID=5509;
 RN [1]
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; U08309; AAC50097.1; -
 DR PIR; S71041; S71041.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL 15
 FT CHAIN 16 214 Major prion protein.
 FT PROPEP 215 232 Removed in mature form (By similarity).
 FT LIPID 214 214 GPI-anchor amidated serine (By similarity).
 FT

FT DISULFID 163 198 By similarity.
 FT CARBOHYD 165 165 N-linked (GlcNAc...) (potential).
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
 FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-W-G-Q.
 FT REPEAT 44 51 0.
 FT REPEAT 52 59 1.
 FT REPEAT 52 59 2.
 FT REPEAT 60 67 3.
 FT REPEAT 68 75 4.
 FT NON_TER 232 232
 SQ SEQUENCE 232 AA; 23596 MW; 0E2D75F04C05CC4A CRC64;
 Query Match 99.6%; Score 245; DB 1; Length 232;
 Best Local Similarity 97.8%; Pred. No. 1.4e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNNNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCV 46
 Db 154 NNNNFVHDCVNIITIKOHTVTTTGGNFETTDVKKMERVVEQNCV 199

RESULT 8
 ID PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Callithrix jacchus (Common marmoset).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrichi.
 OX NCBI_TaxID=9483;
 RN [1]
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; U08304; AAC50092.1; -
 DR PIR; S53634; S53634.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 22 By similarity.
 FT CHAIN 23 229 Major prion protein.
 FT PROPEP 230 252 Removed in mature form (By similarity).
 FT

```
FT LIPID 229 229 GPI-anchor amidated serine (By
FT DISULFID 178 213 similarity).
FT CARBOHYD 180 180 By similarity.
FT CARBOHYD 196 196 N-linked (GlcNAc..)(Potential).
FT DOMAIN 51 90 N-linked (GlcNAc..)(Potential).
FT 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 58 Q.
FT REPEAT 59 66 1.
FT REPEAT 67 74 2.
FT REPEAT 75 82 3.
FT REPEAT 83 90 4.
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FDC664 CRC64;

Query Match 99.6%; Score 245; DB 1; Length 252;
Best Local Similarity 97.8%; Pred. No. 1.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 9
Q811W3 PRELIMINARY; PRT; 215 AA.
AC Q811W3;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
OS Spalax leucodon ehrenbergi (Ehrenberg's mole rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Spalacinae;
OC Nanospalax.
OX NCBI_TaxID=30637;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133041; ANI6495.1; -.
DR InterPro: IPR000817; Prion.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT SEQUENCE 215 AA; 23470 MW; BD89A4E3BD08F649 CRC64;

Query Match 98.8%; Score 243; DB 2; Length 215;
Best Local Similarity 93.5%; Pred. No. 2.3e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 139 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 184

RESULT 10
Q811W4 PRELIMINARY; PRT; 224 AA.
AC Q811W4;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
```

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OS Spalax leucodon ehrenbergi (Ehrenberg's mole rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Spalacinae;
OC Nanospalax.
OX NCBI_TaxID=30637;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133040; ANI6494.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT SEQUENCE 224 AA; 24304 MW; F7E86BC9E37FC99A CRC64;

Query Match 98.8%; Score 243; DB 2; Length 224;
Best Local Similarity 93.5%; Pred. No. 2.4e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 148 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 193

RESULT 11
Q866V8 PRELIMINARY; PRT; 250 AA.
AC Q866V8;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
OS Manis sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Placentalia; Manidae; Manis.
OX NCBI_TaxID=49127;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133050; ANI6504.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion octapep; 7.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 250 250
FT SEQUENCE 250 AA; 27111 MW; 1DC6879702FE0E07 CRC64;
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Query Match 98.8%; Score 243; DB 2; Length 250;
Best Local Similarity 93.5%; Pred. No. 2.7e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 175 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 220
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RESULT 12
O920T5 PRELIMINARY: PRT: 253 AA.
ID O920T5
AC O920T5:
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DE 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
GN Name=Prp;
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
OC Meriones.
OX NCBI_TaxID=10047;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.",
RL J. Mol. Biol. 289:1163-1178(1999);
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL, AF117314; AAD1985.1; -.
DR InterPro, IPR00817; Prion.
DR Pfam, PF00377; Prion; 1.
DR PRINTS; PRO0341; Prion octapep; 6.
DR SMART, SM00157; PrP; 1.
DR PROSITE, PS00291; PRION_1; 1.
DR PROSITE, PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
SQ SEQUENCE 253 AA; 27747 MW; B44D16867A97307F CRC64;

Query Match 98.0%; Score 241; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNQNNFVHDCVNTIKQHTVTTTKGKNTFTETDVKKMERVQMCV 46
DB 169 SNQNNFVHDCVNTIKQHTVTTTKGKNTFTETDVKKMERVQMCV 214

RESULT 13
PRIO_MOUSE STANDARD; PRT; 254 AA.
ID PRIO_MOUSE
AC P04925;
DT 13-AUG-1987 (Rel. 05, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DE 01-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=Prnp; Synonyms=Prn-P;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW, and I/LN1;
RX MEDLINE=88052869; PubMed=2890436;
RA Westaway D., Goodman P.A., Miranda C.A., McKinley M.P., Carlson G.A.,
RA Prusiner S.B.;
RT "Distinct prion proteins in short and long scrapie incubation period
RT mice.",
RL Cell 51:651-662(1987).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=86313583; PubMed=3462700;
RA Loch C., Chesebro B., Race R., Keith J.M.;
RT "Molecular cloning and complete sequence of prion protein cDNA from
RT mouse brain infected with the scrapie agent.",

```

```

RL Proc. Natl. Acad. Sci. U.S.A. 83:6372-6376(1986).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=88166695; PubMed=2894984;
RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;
RT "Molecular pathology of scrapie-associated fibril protein (PrP) in
RT mouse brain affected by the ME7 strain of scrapie.",
RL Eur. J. Biochem. 172:271-277(1988).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW, TISSUE=Brain;
RX MEDLINE=99018115; PubMed=9799790;
RA Lee I.Y., Westaway D., Smit A.F.A., Wang K., Seto J., Chen L.,
RA Acharya C., Ankeny M., Baekin D., Cooper C., Yao H., Prusiner S.B.,
RA Hood L.E.;
RT "Complete genomic sequence and analysis of the prion protein gene
RT region from three mammalian species.",
RL Genome Res. 8:1022-1037(1998).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603999;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Sherman C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ueda T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mulhally S.J.,
RA Bosak S.A., McKernan P.J., McKernan K.J., Abramson R.D., Mulhally S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.U., Hulik S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey U., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhe D.E.,
RA Scherch A., Schein J.E., Jones S.U.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.",
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [6]
RP SEQUENCE OF 87-164 FROM N.A.
RX MEDLINE=85213844; PubMed=3923361;
RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,
RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.;
RT "Identification of scrapie prion protein-specific mRNA in scrapie-
RT infected and uninfected brain.",
RL Nature 315:331-333(1985).
RN [7]
RP STRUCTURE BY NMR OF 120-230.
RX MEDLINE=96317593; PubMed=8700211;
RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,
RA Wuehrich K.;
RT "NMR structure of the mouse prion protein domain PrP(121-221).",
RL Nature 382:180-182(1996).
RN [8]
RP STRUCTURE BY NMR OF 23-231.
RX MEDLINE=97424376; PubMed=9280298;
RA Riek R., Hornemann S., Wider G., Glockshuber R., Wuehrich K.,
RT "NMR characterization of the full-length recombinant murine prion
RT protein, mPrP(23-231).",
RL FEBS Lett. 413:282-288(1997).
RN [9]
RP HYDROXYLATION OF PRO-44.
RX MEDLINE=20490364; PubMed=11032800;
RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,
RA Bocking S.P., Rhle A.G.O., Bennett A.D., Hope J.;
RT "Post-translational hydroxylation at the N-terminus of the prion
RT protein reveals presence of PrP structure in vivo.",
RL EMBO J. 19:5324-5331(2000).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.

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CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC -----
DR EMBL, M18070, AAA39997.1, -
DR EMBL, M18071, AAA39998.1, -
DR EMBL, M13685, AAA39996.1, -
DR EMBL, U29186, AAC02804.1, -
DR EMBL, BC006703, AA06703.1, -
DR EMBL, M30384, AAA39999.1, -
DR PIR, A29669, A23544, -
DR PDB, 1AG2, NMR, @=123-225.
DR MGD, MGI:97769, Prnp.
DR GO, GO:0005793, C:endooplasmic reticulum, IDA.
DR GO, GO:0005794, C:Golgi apparatus, IDA.
DR GO, GO:0045121, C:lipid raft, IDA.
DR GO, GO:0005507, P:copper ion binding, IDA.
DR GO, GO:0006979, P:response to oxidative stress, IDA.
DR InterPro, IPR00817, Prion.
DR Pfam, PF00377, Prion, 1.
DR Pfam, PF03991, Prion octapep, 6.
DR PRINTS, PR00341, PRION.
DR PROSITE, PS00291, PRION_1, 1.
DR PROSITE, PS00706, PRION_2, 1.
DR 3D-structure, Glycoprotein, GPI-anchor, Hydroxylation, Lipoprotein,
DR Polymorphism, Prion, Repeat, Signal.
DR SIGNAL, 1, 22
FT CHAIN 23 230
FT PROPEP 231 254
FT MOD_RS 44 44
FT LIPID 230 230
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DISULFID 178 213
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 64
FT REPEAT 67 74
FT REPEAT 83 82
FT REPEAT 83 90
FT VARIANT 108 108
FT VARIANT 189 189
FT CONFLICT 133 133
FT TURN 124 126
FT STRAND 128 129
FT STRAND 143 152
FT TURN 153 155
FT STRAND 161 162
FT HELIX 171 191
FT TURN 192 194
FT HELIX 199 221
FT TURN 222 224
SQ SEQUENCE 254 AA; 27977 MW; D5331B6321826CC0 CRC64;
Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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OY 1 NNONFVHCNVNITIKQHTVTTTKGFTEFDVKMERVEMQCV 46
DB 169 SNOQNVFHCNVNITIKQHTVTTTKGFTEFDVKMERVEMQCV 214
RESULT 14
PRIO RAT STANDARD; PRT; 254 AA.
AC P13852;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp).
GN Name=Prnp; Synonyms=Prn;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN RN
RP SEQUENCE FROM N.A.
RC STRAIN=Zitter, and SJ/D, TISSUE=Liver;
RX MEDLINE=97033369; PubMed=8879116;
RA Sasaki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;
RT "Three-exon structure of the gene encoding the rat prion protein and
RT its expression in tissues."
RL Virus Genes 12:15-20(1996).
RN [3]
RP SEQUENCE OF 29-254 FROM N.A.
RX MEDLINE=88037055; PubMed=2889848;
RA Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,
RA Clawson G.A.;
RT "Cloning of rat 'prion-related protein' cDNA."
RL Lab. Invest. 57:370-374(1987).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
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CC modified and this statement is not removed. Usage by and for commercial
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL, S69654, AAB30728.2, -
DR EMBL, D50093, BAA08790.1, -
DR EMBL, M20313, AAA41947.1, -
DR PIR, A53882, A53882.
DR HSSP, P04925, 1AG2.
DR RGD, 3410, Prnp.
DR InterPro, IPR00817, Prion.
DR Pfam, PF00377, Prion, 1.
DR Pfam, PF03991, Prion octapep, 6.
DR PRINTS, PR00341, PRION.

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DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 28 Potential.
 FT CHAIN 29 231 Major prion protein.
 FT PROPEP 232 254 Removed in mature form (By similarity).
 FT LIPID 231 231 GPI-anchor amidated serine (By
 similarity).
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Probable).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Probable).
 FT DISULFID 179 214 By similarity.
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 0.
 FT REPEAT 51 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 FT REPEAT 84 91 5.
 FT REPEAT 84 91 5.
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Query Match 98.0%; Score 241; DB 1; Length 254;
 Best Local Similarity 97.8%; Pred. No. 5e-22; 0; Indels 0; Gaps 0;
 Matches 45; Conservative 1; Mismatches 0;

OY 1 NNONNFVHDCVNITIKQHTVTTTGGNFETIDVKMERVVEQMCV 46
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 DB 170 SNONNFVHDCVNITIKQHTVTTTGGNFETIDVKMERVVEQMCV 215

RESULT 15

OSVHV6 PRELIMINARY; PRT; 254 AA.
 ID OSVHV6
 AC OSVHV6
 DT 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Prion protein.
 GN Name=PrP;
 OS Apodemus sylvaticus (European woodmouse).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 OC Apodemus.
 OC NCBI_TaxID=10129;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,
 Di Garbo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
 RL -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AF367623; AAL57230.1; --
 CC HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00344; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
 SQ SEQUENCE 254 AA; 27857 MW; CB2B5658C47A8885 CRC64;

Query Match 98.0%; Score 241; DB 2; Length 254;
 Best Local Similarity 97.8%; Pred. No. 5e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNITIKQHTVTTTGGNFETIDVKMERVVEQMCV 46
 :|||||
 DB 170 SNONNFVHDCVNITIKQHTVTTTGGNFETIDVKMERVVEQMCV 215

Search completed: December 3, 2004, 00:35:31
 Job time: 75.3541 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(Without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221
Perfect score: 246
Sequence: 1 NNQNNFVHDCVNTTKQHTV.....ENFTDVKMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:
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3: /cgn2_6/prodata/1/iaa/6A COMB pep: *
4: /cgn2_6/prodata/1/iaa/6B COMB pep: *
5: /cgn2_6/prodata/1/iaa/PCUS COMB pep: *
6: /cgn2_6/prodata/1/iaa/backfile1 pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	246	100.0	254 4 US-09-431-887-23	Sequence 23, Appl
2	245	99.6	252 4 US-09-431-887-13	Sequence 13, Appl
3	241	98.0	254 1 US-08-242-188-1	Sequence 1, Appl
4	241	98.0	254 1 US-08-509-261A-1	Sequence 1, Appl
5	241	98.0	254 1 US-08-660-626-7	Sequence 7, Appl
6	241	98.0	254 1 US-08-692-892-1	Sequence 1, Appl
7	241	98.0	254 2 US-08-713-939A-1	Sequence 21, Appl
8	241	98.0	254 2 US-08-868-162A-21	Sequence 7, Appl
9	241	98.0	254 3 US-09-031-168-7	Sequence 13, Appl
10	241	98.0	254 3 US-09-128-450-19	Sequence 28, Appl
11	241	98.0	254 3 US-09-128-450-28	Sequence 1, Appl
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14	241	98.0	254 3 US-09-823-494-28	Sequence 1, Appl
15	241	98.0	254 3 US-09-550-374-1	Sequence 10, Appl
16	241	98.0	254 4 US-09-431-887-20	Sequence 2, Appl
17	241	98.0	254 4 US-09-431-887-21	Sequence 21, Appl
18	241	98.0	254 4 US-09-627-218B-10	Sequence 10, Appl
19	241	98.0	254 4 US-09-943-906-1	Sequence 7, Appl
20	241	98.0	254 4 US-09-668-516C-7	Sequence 10, Appl
21	240	97.6	142 1 US-08-556-823-10	Sequence 5, Appl
22	240	97.6	245 4 US-09-431-887-5	Sequence 15, Appl
23	240	97.6	245 4 US-09-431-887-15	Sequence 17, Appl
24	240	97.6	252 4 US-09-431-887-17	Sequence 2, Appl
25	240	97.6	253 1 US-08-242-188-2	Sequence 2, Appl
26	240	97.6	253 1 US-08-509-261A-2	Sequence 8, Appl
27	240	97.6	253 1 US-08-660-626-8	Sequence 8, Appl

28	240	97.6	253 1 US-08-692-892-2	Sequence 2, Appl
29	240	97.6	253 2 US-08-713-939A-2	Sequence 2, Appl
30	240	97.6	253 2 US-08-868-162A-22	Sequence 22, Appl
31	240	97.6	253 3 US-09-031-168-8	Sequence 8, Appl
32	240	97.6	253 3 US-09-128-450-20	Sequence 20, Appl
33	240	97.6	253 3 US-09-036-579-2	Sequence 2, Appl
34	240	97.6	253 3 US-09-823-494-20	Sequence 20, Appl
35	240	97.6	253 3 US-09-550-374-2	Sequence 2, Appl
36	240	97.6	253 4 US-09-431-887-1	Sequence 1, Appl
37	240	97.6	253 4 US-09-431-887-3	Sequence 3, Appl
38	240	97.6	253 4 US-09-431-887-4	Sequence 4, Appl
39	240	97.6	253 4 US-09-431-887-7	Sequence 7, Appl
40	240	97.6	253 4 US-09-431-887-9	Sequence 9, Appl
41	240	97.6	253 4 US-09-431-887-10	Sequence 10, Appl
42	240	97.6	253 4 US-09-431-887-11	Sequence 11, Appl
43	240	97.6	253 4 US-09-431-887-12	Sequence 12, Appl
44	240	97.6	253 4 US-09-431-887-14	Sequence 14, Appl
45	240	97.6	253 4 US-09-431-887-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-09-431-887-23
Sequence 23, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOP/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 23
LENGTH: 254
TYPE: PRT
ORGANISM: Mesocricetus auratus
US-09-431-887-23

Query Match 100.0%; Score 246; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 7.3e-26; Index 0; Gaps 0;
Matches 46; Conservative 0; Mismatches 0;

CY 1 NNQNNFVHDCVNTTKQHTVTTTGGNFETDVKMERVVEQMCV 46
DB 170 NNQNNFVHDCVNTTKQHTVTTTGGNFETDVKMERVVEQMCV 215

RESULT 2
US-09-431-887-13
Sequence 13, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOP/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 252
TYPE: PRT
ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 99.6%; Score 245; DB 4; Length 252;
Best Local Similarity 97.8%; Pred. No. 1e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 214

RESULT 3

US-08-242-188-1
Sequence 1, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-242-188-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 214

RESULT 4

US-08-509-261A-1
Sequence 1, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions

TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQMCV 214

RESULT 5

US-08-660-626-7
Sequence 7, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascliti
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrp
US-08-660-626-7

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 6
US-08-692-892-1
Sequence 1, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrp
US-08-692-892-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 7
US-08-713-939A-1
Sequence 1, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/713,939A

FILING DATE: 13-SEP-1996

CLASSIFICATION: 436

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX:

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-713-939A-1

Query Match 98.0%; Score 241; DB 2; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 8
US-08-868-162A-21
Sequence 21, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi

TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fastseq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-868-162A-21

Query Match
Best Local Similarity 98.0%; Score 241; DB 2; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 214

RESULT 9
US-09-031-168-7
Sequence 7, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valecia Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-09-031-168-7

Query Match
Best Local Similarity 98.0%; Score 241; DB 3; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 214

RESULT 10
US-09-128-450-19
Sequence 19, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-19

Query Match
Best Local Similarity 98.0%; Score 241; DB 3; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGENTFTDVKMERVVEQMCV 214

RESULT 11
US-09-128-450-28
Sequence 28, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W

APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-28

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 12
US-09-036-579-1
Sequence 1, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-1

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 13
US-09-823-494-19
Sequence 19, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-823-494-19

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 14
US-09-823-494-28
Sequence 28, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-823-494-28

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 15

US-09-550-374-1
; Sequence 1, Application US/09550374
; Patent No. 6372214
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Fast-Seq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/550,374
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/036,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-550-374-1

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
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Db 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

Search completed: December 3, 2004, 00:18:58
Job time : 18.4197 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	246	100.0	254	14	US-10-410-907A-6
3	246	100.0	254	14	US-10-410-907A-7
4	245	99.6	252	14	US-10-304-630-13
5	241	98.0	124	14	US-10-050-902-324
6	241	98.0	124	14	US-10-050-898-324
7	241	98.0	124	14	US-10-346-190-93
8	241	98.0	164	9	US-09-745-003-12
9	241	98.0	209	16	US-10-470-848-6
10	241	98.0	209	16	US-10-470-848-7
11	241	98.0	225	14	US-10-301-488A-25
12	241	98.0	225	15	US-10-301-448-25
13	241	98.0	226	14	US-10-205-194-121

14	241	98.0	254	9	US-09-823-494-19	Sequence 19, App1
15	241	98.0	254	9	US-09-823-494-28	Sequence 28, App1
16	241	98.0	254	9	US-09-943-906-1	Sequence 1, App1
17	241	98.0	254	13	US-10-106-574-5	Sequence 5, App1
18	241	98.0	254	13	US-10-106-574-6	Sequence 6, App1
19	241	98.0	254	13	US-10-106-574-7	Sequence 7, App1
20	241	98.0	254	13	US-10-106-574-8	Sequence 8, App1
21	241	98.0	254	14	US-10-355-760-10	Sequence 10, App1
22	241	98.0	254	14	US-10-304-630-20	Sequence 20, App1
23	241	98.0	254	14	US-10-304-630-21	Sequence 21, App1
24	241	98.0	254	14	US-10-301-488A-24	Sequence 24, App1
25	241	98.0	254	14	US-10-410-907A-9	Sequence 9, App1
26	241	98.0	254	14	US-10-346-190-87	Sequence 87, App1
27	241	98.0	254	14	US-10-435-602-1	Sequence 1, App1
28	241	98.0	254	15	US-10-438-628-2	Sequence 2, App1
29	241	98.0	254	15	US-10-301-448-24	Sequence 24, App1
30	241	98.0	254	16	US-10-470-848-9	Sequence 9, App1
31	241	98.0	255	16	US-10-470-848-5	Sequence 5, App1
32	241	98.0	350	14	US-10-050-902-323	Sequence 323, App
33	241	98.0	350	14	US-10-050-898-323	Sequence 323, App
34	241	98.0	350	14	US-10-346-190-92	Sequence 92, App1
35	241	98.0	439	13	US-10-115-984-2	Sequence 2, App1
36	240	97.6	117	14	US-10-050-902-348	Sequence 348, App
37	240	97.6	117	14	US-10-050-898-348	Sequence 348, App
38	240	97.6	117	14	US-10-346-190-89	Sequence 89, App1
39	240	97.6	141	16	US-10-612-356A-1	Sequence 10, App1
40	240	97.6	162	9	US-09-745-003-10	Sequence 10, App1
41	240	97.6	163	14	US-10-104-047-2013	Sequence 2013, App
42	240	97.6	200	16	US-10-470-848-10	Sequence 10, App1
43	240	97.6	208	16	US-10-470-848-3	Sequence 3, App1
44	240	97.6	208	17	US-10-745-393-1	Sequence 1, App1
45	240	97.6	245	14	US-10-304-630-5	Sequence 5, App1

ALIGNMENTS

RESULT 1
US-10-304-630-23
; Sequence 23, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 23
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mesocricetus auratus
; US-10-304-630-23

Query Match 100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7.6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNTTKQHTVTTTGGKGFETEDVQMBRVVEQMCV 46
Db 170 NNQNNFVHDCVNTTKQHTVTTTGGKGFETEDVQMBRVVEQMCV 215

RESULT 2
US-10-410-907A-6
; Sequence 6, Application US/10410907A
; Publication No. US20030215860A1

```
/ GENERAL INFORMATION:
/ APPLICANT: Dennis R. Burton
/ APPLICANT: R. Anthony Williamson
/ APPLICANT: Gianluca Moroncini
/ TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
/ FILE REFERENCE: 22908-1229
/ CURRENT APPLICATION NUMBER: US/10/410,907A
/ PRIOR FILING DATE: 2003-04-08
/ PRIOR APPLICATION NUMBER: 60/371,610
/ PRIOR FILING DATE: 2002-04-09
/ NUMBER OF SEQ ID NOS: 36
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 6
/ LENGTH: 254
/ TYPE: PRT
/ ORGANISM: Mesocricetus auratus (Armenian hamster)
US-10-410-907A-6
```

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Query Match          100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7,6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 170 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 215
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```
RESULT 3
US-10-410-907A-7
/ Sequence 7, Application US/0410907A
/ Publication No. US20030215880A1
/ GENERAL INFORMATION:
/ APPLICANT: Dennis R. Burton
/ APPLICANT: R. Anthony Williamson
/ APPLICANT: Gianluca Moroncini
/ TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
/ FILE REFERENCE: 22908-1229
/ CURRENT APPLICATION NUMBER: US/10/410,907A
/ PRIOR FILING DATE: 2003-04-08
/ PRIOR APPLICATION NUMBER: 60/371,610
/ PRIOR FILING DATE: 2002-04-09
/ NUMBER OF SEQ ID NOS: 36
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 7
/ LENGTH: 254
/ TYPE: PRT
/ ORGANISM: Cricetus griseus (Chinese hamster)
US-10-410-907A-7
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```
Query Match          100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7,6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 170 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 215
```

```
RESULT 4
US-10-304-630-13
/ Sequence 13, Application US/10304630
/ Publication No. US20030161836A1
/ GENERAL INFORMATION:
/ APPLICANT: D-gen Limited
/ TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
/ FILE REFERENCE: ICOT/P21952
/ CURRENT APPLICATION NUMBER: US/10/304,630
/ PRIOR FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: US/09/431,887
/ PRIOR FILING DATE: 1999-11-02
```

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/ PRIOR APPLICATION NUMBER: GB 9824091.4
/ PRIOR FILING DATE: 1999-11-04
/ NUMBER OF SEQ ID NOS: 37
/ SOFTWARE: Patent In Ver. 2.0
/ SEQ ID NO 13
/ LENGTH: 252
/ TYPE: PRT
/ ORGANISM: Callithrix sp.
US-10-304-630-13
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Query Match          99.6%; Score 245; DB 14; Length 252;
Best Local Similarity 97.8%; Pred. No. 1e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 169 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 214
```

```
RESULT 5
US-10-050-902-324
/ Sequence 324, Application US/10050902
/ Publication No. US20030175290A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisseot, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Sebbel, Peter
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700,0190004
/ CURRENT APPLICATION NUMBER: US/10/050,902
/ PRIOR FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
/ PRIOR APPLICATION NUMBER: US 60/288,549
/ PRIOR FILING DATE: 2001-05-04
/ PRIOR APPLICATION NUMBER: US 60/326,998
/ PRIOR FILING DATE: 2001-10-05
/ PRIOR APPLICATION NUMBER: US 60/331,045
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 350
/ SOFTWARE: Patent In Ver. 2.1
/ SEQ ID NO 324
/ LENGTH: 124
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: mPrp construct
US-10-050-902-324
```

```
Query Match          98.0%; Score 241; DB 14; Length 124;
Best Local Similarity 97.8%; Pred. No. 1,4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 50 NNNNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMCV 95
```

```
RESULT 6
US-10-050-898-324
/ Sequence 324, Application US/10050898
/ Publication No. US2003015711A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisseot, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Sebbel, Peter
```


APPLICANT: Plosek, Christine
 APPLICANT: Ortmann, Rainer
 APPLICANT: Luond, Rainer
 APPLICANT: Staufenbiel, Matthias
 APPLICANT: Frey, Peter
 TITLE OF INVENTION: Molecular Antigen Array
 FILE REFERENCE: 1700.0190005
 CURRENT APPLICATION NUMBER: US/10/050,898
 PRIOR FILING DATE: 2002-01-18
 PRIOR APPLICATION NUMBER: US 60/262,379
 PRIOR FILING DATE: 2001-01-19
 PRIOR APPLICATION NUMBER: US 60/288,549
 PRIOR FILING DATE: 2001-05-04
 PRIOR APPLICATION NUMBER: US 60/326,998
 PRIOR FILING DATE: 2001-10-05
 PRIOR APPLICATION NUMBER: US 60/331,045
 PRIOR FILING DATE: 2001-11-07
 NUMBER OF SEQ ID NOS: 350
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO 324
 LENGTH: 124
 TYPE: PRT
 ORGANISM: Artificial Sequence
 OTHER INFORMATION: Protein sequence of mPrPc
 US-10-050-898-324

Query Match 98.0%; Score 241; DB 14; Length 124;
 Best Local Similarity 97.8%; Pred. No. 1.4e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 :|||||
 Db 50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

RESULT 7
 US-10-346-190-93
 Sequence 93, Application US/10346190
 Publication No. US20030219459A1
 GENERAL INFORMATION:
 APPLICANT: Bachmann, Martin
 APPLICANT: Maurer, Patrick
 APPLICANT: Pellisio, Erica
 APPLICANT: Renner, Wolfgang A.
 TITLE OF INVENTION: Prion Protein Carrier-Conjugates
 FILE REFERENCE: 1700.0290003
 CURRENT APPLICATION NUMBER: US/10/346,190
 CURRENT FILING DATE: 2003-01-17
 PRIOR APPLICATION NUMBER: 60/396,590
 PRIOR FILING DATE: 2002-07-18
 PRIOR APPLICATION NUMBER: 60/393,725
 PRIOR FILING DATE: 2002-07-08
 PRIOR APPLICATION NUMBER: 60/389,898
 PRIOR FILING DATE: 2002-06-20
 PRIOR APPLICATION NUMBER: PCT/IB02/00166
 PRIOR FILING DATE: 2002-01-21
 PRIOR APPLICATION NUMBER: 10/050,902
 PRIOR FILING DATE: 2002-01-18
 NUMBER OF SEQ ID NOS: 164
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO 93
 LENGTH: 124
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: mPrPc
 US-10-346-190-93

Query Match 98.0%; Score 241; DB 14; Length 124;
 Best Local Similarity 97.8%; Pred. No. 1.4e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 :|||||
 Db 50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

RESULT 8
 US-09-745-003-12
 Sequence 12, Application US/09745003
 Patent No. US20020042122A1
 GENERAL INFORMATION:
 APPLICANT: Bazan, Fernando J
 TITLE OF INVENTION: Human Proteins; Related Reagents
 FILE REFERENCE: PrP2
 CURRENT APPLICATION NUMBER: US/09/745,003
 CURRENT FILING DATE: 2000-12-20
 NUMBER OF SEQ ID NOS: 13
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 12
 LENGTH: 164
 TYPE: PRT
 ORGANISM: rodent
 US-09-745-003-12

Query Match 98.0%; Score 241; DB 9; Length 164;
 Best Local Similarity 97.8%; Pred. No. 2e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 :|||||
 Db 79 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 124

RESULT 9
 US-10-470-848-6
 Sequence 6, Application US/10470848
 Publication No. US20040137421A1
 GENERAL INFORMATION:
 APPLICANT: President of Tohoku University
 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 FILE REFERENCE: PH-1224-PCT
 CURRENT APPLICATION NUMBER: US/10/470,848
 CURRENT FILING DATE: 2003-07-31
 PRIOR APPLICATION NUMBER: JP 2001-24279
 PRIOR FILING DATE: 2001-01-31
 NUMBER OF SEQ ID NOS: 10
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 6
 LENGTH: 209
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: C₁M-type prion protein
 US-10-470-848-6

Query Match 98.0%; Score 241; DB 16; Length 209;
 Best Local Similarity 97.8%; Pred. No. 2.7e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 :|||||
 Db 148 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 193

RESULT 10
 US-10-470-848-7
 Sequence 7, Application US/10470848
 Publication No. US20040137421A1
 GENERAL INFORMATION:
 APPLICANT: President of Tohoku University
 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 FILE REFERENCE: PH-1224-PCT
 CURRENT APPLICATION NUMBER: US/10/470,848
 CURRENT FILING DATE: 2003-07-31

PRIOR APPLICATION NUMBER: JP 2001-24279
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 209
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Description of Artificial Sequence: Chv type prion protein
US-10-470-848-7

Query Match 98.0%; Score 241; DB 16; Length 209;
Best Local Similarity 97.8%; Pred. No. 2.7e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 148 SNONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMCV 193
:|||||

RESULT 11
US-10-301-488A-25
Sequence 25, Application US/10301488A
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: MISNIEMSKI, Thomas
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
TITLE OF INVENTION: IMMUNE RESPONSE THERETO
FILE REFERENCE: 5986/1K434US1
CURRENT APPLICATION NUMBER: US/10/301,488A
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 225
TYPE: PRT
ORGANISM: Rat
US-10-301-488A-25

Query Match 98.0%; Score 241; DB 14; Length 225;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMCV 187
:|||||

RESULT 12
US-10-301-448-25
Sequence 25, Application US/10301448
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: MISNIEMSKI, Thomas
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
TITLE OF INVENTION: IMMUNE RESPONSE THERETO
FILE REFERENCE: 5986/1K434US1
CURRENT APPLICATION NUMBER: US/10/301,448
CURRENT FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55

SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 225
TYPE: PRT
ORGANISM: Rat
US-10-301-448-25

Query Match 98.0%; Score 241; DB 15; Length 225;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMCV 187
:|||||

RESULT 13
US-10-205-194-121
Sequence 121, Application US/10205194
GENERAL INFORMATION:
APPLICANT: Warner-Lambert Company
APPLICANT: Lee, Kevin
APPLICANT: Dixon, Alistair
APPLICANT: Brooksbank, Robert
TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
FILE REFERENCE: WL-A-018201
CURRENT APPLICATION NUMBER: US/10/205,194
CURRENT FILING DATE: 5200-07-24
PRIOR APPLICATION NUMBER: GB 0118354.0
PRIOR FILING DATE: 2001-07-27
NUMBER OF SEQ ID NOS: 177
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 121
LENGTH: 226
TYPE: PRT
ORGANISM: Rattus norvegicus
FEATURES:
OTHER INFORMATION: PRP
US-10-205-194-121

Query Match 98.0%; Score 241; DB 14; Length 226;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQMCV 187
:|||||

RESULT 14
US-09-823-494-19
Sequence 19, Application US/09823494
GENERAL INFORMATION:
APPLICANT: Chesbro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Sueette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus

US-09-823-494-19

Query Match 98.0%; Score 241; DB 9; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
:|||||
DB 169 SNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 214

RESULT 15

US-09-823-494-28

; Sequence 28; Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:

; APPLICANT: Chesedro, Bruce W

; APPLICANT: Caughey, Byron W

; APPLICANT: Chabry, Joelle

; APPLICANT: Priola, Suelette

; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion

; FILE REFERENCE: 50121

; CURRENT APPLICATION NUMBER: US/09/823,494

; CURRENT FILING DATE: 2001-03-30

; PRIOR APPLICATION NUMBER: 09/128,450

; PRIOR FILING DATE: 1998-08-03

; NUMBER OF SEQ ID NOS: 29

; SOFTWARE: Patent In Ver. 2.0

; SEQ ID NO 28

; LENGTH: 254

; TYPE: PRT

; ORGANISM: Mus musculus

US-09-823-494-28

Query Match 98.0%; Score 241; DB 9; Length 254;

Best Local Similarity 97.8%; Pred. No. 3.4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 46
:|||||
DB 169 SNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMCV 214

Search completed: December 3, 2004, 01:07:47
Job time: 55.4459 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTITTKGENTFETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_23Sep04.*

1: geneeqp1980s.*
2: geneeqp1990s.*
3: geneeqp2000s.*
4: geneeqp2001s.*
5: geneeqp2002s.*
6: geneeqp2003s.*
7: geneeqp2003bs.*
8: geneeqp2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mpr
5	193	100.0	124	5	ABG80652 Mouse tru
6	193	100.0	124	7	ADD24200 mPrP-EK-
7	193	100.0	142	7	AAW17686 Prion pro
8	193	100.0	163	7	ADB63859 Human pro
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	AAW07316 Mouse pri
11	193	100.0	208	3	AAW07318 Human pri
12	193	100.0	208	3	AAW07327 Mouse pri
13	193	100.0	208	3	AAW07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-c
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	5	ABG31905 HCNV type
18	193	100.0	211	4	AAW0801 Amino aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Monkey pr
21	193	100.0	245	4	AAW72342 Cercopit
22	193	100.0	245	4	AAW72352 Cercopit
23	193	100.0	253	2	AAW86715 Human pri
24	193	100.0	253	2	AAW69660 Human pri
25	193	100.0	253	2	AAW85901 Human pri

26	193	100.0	253	2	AAW07994 Human pri
27	193	100.0	253	3	AAW81485 Human pri
28	193	100.0	253	3	AAW06272 Human pri
29	193	100.0	253	3	AAW15035 Human pri
30	193	100.0	253	4	AAW72339 Chimpanze
31	193	100.0	253	4	AAW72347 Prion pro
32	193	100.0	253	4	AAW72353 Guezeza p
33	193	100.0	253	4	AAW72344 Rhesus mo
34	193	100.0	253	4	AAW72345 Gibbon pr
35	193	100.0	253	4	AAW72350 Marmoset
36	193	100.0	253	4	AAW72351 Hamadryas
37	193	100.0	253	4	AAW72348 Prion pro
38	193	100.0	253	4	AAW72356 Stiamang p
39	193	100.0	253	4	AAW72346 Prion pro
40	193	100.0	253	4	AAW72355 Prion pro
41	193	100.0	253	4	AAW72349 Prion pro
42	193	100.0	253	4	AAW72340 Orangutan
43	193	100.0	253	4	AAW72358 Human pri
44	193	100.0	253	4	AAW72354 Capuchin
45	193	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.

AC ABG94357;

DT 10-DEC-2002 (first entry)

DE Modified human prion protein fragment.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;

KW cytochrome; antiviral; antidiabetic; hypoglycaemic; antigen array;

KM vaccine; infectious disease.

OS Homo sapiens.

XX W0200256905-A2.

XX 25-JUL-2002.

XX 21-JAN-2002; 2002MO-1B000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;

XX Piossek C;

XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious

XX diseases.

XX Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array
used in the production of vaccines for infectious diseases. The invention
also discloses a composition comprising a non-natural molecular scaffold
comprising a core particle selected from a core particle of a non-natural
origin and a core particle of natural origin and an organizer is connected to
at least one first attachment site, where the organizer is connected to
the core particle by at least one covalent bond. Also disclosed is an
antigen or antigenic determinant with at least one second attachment
site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abetal-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Obeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention

CC XX
 SQ Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNIITIKOHTVTTTNGENFTETDVKMMER 36
 DB 52 NNFWHDCVNIITIKOHTVTTTNGENFTETDVKMMER 87

RESULT 2
 ABG80669
 ID ABG80669 standard; protein, 117 AA.
 XX
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Human prion protein/cysteine-containing peptide fusion protein.
 XX
 DE Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutin;
 KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288649P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Lueoend R, Stauenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisot A, Seibel P, Ploesek C;
 XX WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

CC XX
 SQ Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNIITIKOHTVTTTNGENFTETDVKMMER 36
 DB 52 NNFWHDCVNIITIKOHTVTTTNGENFTETDVKMMER 87

RESULT 3
 ADD24196
 ID ADD24196 standard; protein, 117 AA.
 XX
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Modified human prion protein amino acid sequence.
 XX
 DE Vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; muten.
 XX
 OS Synthetic.
 OS prion.
 XX
 PN WO2003059386-A2.
 XX

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 XX 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 CC
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNPFHDCVNITIKOHTVTTTKGKGFETDVKKMER 36
 Db 52 NNPFHDCVNITIKOHTVTTTKGKGFETDVKKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KW vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 PF 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Plosser C;
 XX
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 CC
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β subunit coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNPFHDCVNITIKOHTVTTTKGKGFETDVKKMER 36
 Db 53 NNPFHDCVNITIKOHTVTTTKGKGFETDVKKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; A β 1-42; influenza; mitein;
 KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enkerkinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-1B000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisack A, Seibel P, Plosssek C;
 XX MPI, 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7; Page 415; 418pp; English.
 XX
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an organismer comprising at least one first attachment
 CC site, where the organismer is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (A β 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attaching site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitively antigen array.
 CC Also included is a process for producing a non-naturally antigen array,
 CC ordered and repetitively antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiotumoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (endorphinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 193; DB 5; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVYQMMR 36
 Db 53 NNFVHDCVNIITIKQHTVTTTGGNFETEDVYQMMR 88

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 AC 15-JAN-2004 (first entry)
 XX
 DE mPrP-EK-Fc* cleaved protein sequence.
 XX
 KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX MPI; 2003-598483/56.
 DR
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 193; DB 7; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVYQMMR 36
 Db 53 NNFVHDCVNIITIKQHTVTTTGGNFETEDVYQMMR 88
 RESULT 7
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN WO9716728-A1.
 XX
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96NO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556823.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Prusiner SB, Kaneko K, Cohen FE;
 PI
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9,4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 119
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 DE
 XX Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 XX 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isogaki T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S,
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y,
 XX
 XX WPI; 2003-450961/43.
 DR
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS
 XX Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX
 SQ Sequence 163 AA;
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 118
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 DE
 XX Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jakob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002MO-JP000803.
PF
XX 31-JAN-2001; 2001JP-00024279.
PR
XX (TOHO) UNITV TOHOKU.
PA Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX PT indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX CC indication. The method of the invention is useful for screening (non-)
XX CC human prion disease infection factor, which is applicable in safety tests
XX CC on drugs like blood preparations, foods and cosmetics, and for developing
XX CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX CC disease (CJD). The method of the invention is simple and quick. The
XX CC present sequence represents a human prion related protein of the
XX CC invention.
XX
XX Sequence 200 AA;
XX
XX Query Match 100.0%; Score 193; DB 5; Length 200;
XX Best Local Similarity 100.0%; Pred. No. 1.4e-18; Indels 0; Gaps 0;
XX Matches 36; Conservative 0; Mismatches 0;
XX
XX 1 NNPFVHDCVNITIKOHTVTTTKGENTFETDVKMMER 36
XX 143 NNPFVHDCVNITIKOHTVTTTKGENTFETDVKMMER 178
XX
XX RESULT 10
XX AAB07316
XX ID AAB07316 standard; protein; 208 AA.
XX
XX AC AAB07316;
XX
XX DT 17-OCT-2000 (first entry)
XX
XX Mouse prion protein sequence.
XX
XX DE Mouse; prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX OS Mus sp.
XX
XX FH Key Location/Qualifiers
XX FT 37..68 Repeat region consisting of tandem repeats of
XX FT /note="Repeat region consisting of tandem repeats of
XX FT repeat unit: PHGGGMCQ (AAB07319)"
XX FT 156..191
XX FT Disulfide-bond 208
XX FT Modified-site /note="C-terminal phospho-inositol glycolipid membrane
XX FT anchor (-GPI)"
XX
XX PN WO200029850-A1.
XX
XX PD 25-MAY-2000.
XX
XX PF 27-OCT-1999; 99WO-FI000897.
XX
XX PR 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX PA (BBSR-) BBSRC OFFICE.
XX

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of
XX PT transmissible spongiform encephalopathies in bovine.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX CC insoluble isoform is implicated in the pathogenesis of transmissible
XX CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
XX CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX CC this protein in body fluid or tissue samples may be measured by an
XX CC assay of the present invention, in which a PrP epitope is captured by an
XX CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX CC epitopes (AAB07320-B07326) are derived from the protease resistant core
XX CC of PrP that is occluded when the PrP is in an aggregated state.
XX
XX Sequence 208 AA;
XX
XX Query Match 100.0%; Score 193; DB 3; Length 208;
XX Best Local Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0;
XX Matches 36; Conservative 0; Mismatches 0;
XX
XX 1 NNPFVHDCVNITIKOHTVTTTKGENTFETDVKMMER 36
XX 150 NNPFVHDCVNITIKOHTVTTTKGENTFETDVKMMER 185
XX
XX RESULT 11
XX AAB07318
XX ID AAB07318 standard; protein; 208 AA.
XX
XX AC AAB07318;
XX
XX DT 17-OCT-2000 (first entry)
XX
XX Human prion protein sequence.
XX
XX DE Human; prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT 29..69 Repeat region consisting of tandem repeats of
XX FT /note="Repeat region consisting of tandem repeats of
XX FT repeat unit: PHGGGMCQ (AAB07319)"
XX FT 157..192
XX FT Disulfide-bond 208
XX FT Modified-site /note="C-terminal phospho-inositol glycolipid membrane
XX FT anchor (-GPI)"
XX
XX PN WO200029850-A1.
XX
XX PD 25-MAY-2000.
XX
XX PF 27-OCT-1999; 99WO-FI000897.
XX
XX PR 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX PA (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of
XX PT

```

transmissible spongiform encephalopathies in bovine.

XX Disclosure; Page 43-44; 50pp; English.

XX

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an

XX antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX

XX Sequence 208 AA;

XX

XX Query Match 100.0%; Score 193; DB 3; Length 208;

XX Best Local Similarity 100.0%; Pred. No. 1.5e-18;

XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX

XX 1 NNFVHDCVNITIKQHTVTTTGGNFETETDYKMER 36

XX Db 151 NNFVHDCVNITIKQHTVTTTGGNFETETDYKMER 186

XX

XX RESULT 12

XX AAB07327

XX ID AAB07327 standard; protein; 208 AA.

XX

XX AAB07327;

XX AC

XX 17-OCT-2000 (first entry)

XX DT

XX Mouse prion protein sequence.

XX DB

XX Mouse; prion protein; transmissible spongiform encephalopathy;

XX KW bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX KM

XX Mus sp.

XX OS

XX Key Location/Qualifiers

XX FH 37..68

XX FT /note= "Repeat region consisting of tandem repeats of

XX FT repeat unit: PHGGGWGQ (AAB07319)"

XX FT Disulfide-bond 156..191

XX FT Modified-site 208

XX FT /note= "C-terminal phospho-inositol glycolipid membrane

XX FT anchor (-GPI)"

XX PN

XX MO200029849-A1.

XX PD

XX 25-MAY-2000.

XX PF

XX 27-OCT-1999; 99WO-FI000896.

XX PR

XX 17-NOV-1998; 98FI-00002480.

XX PA (WALL-) WALLAC OY.

XX PA (BBSR-) BBSRC OFFICE.

XX PI Hope J, Barnard GJR, Birkett CR;

XX PT WPI; 2000-399778/34.

XX PS

XX New immunoassay for prion protein, used for determination of

XX PT transmissible spongiform encephalopathies in mammals, comprises specific

XX PT capture antibody.

XX PS Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an

XX antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX

XX Sequence 208 AA;

XX

XX Query Match 100.0%; Score 193; DB 3; Length 208;

XX Best Local Similarity 100.0%; Pred. No. 1.5e-18;

XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX

XX 1 NNFVHDCVNITIKQHTVTTTGGNFETETDYKMER 36

XX Db 150 NNFVHDCVNITIKQHTVTTTGGNFETETDYKMER 185

XX

XX RESULT 13

XX AAB07329

XX ID AAB07329 standard; protein; 208 AA.

XX

XX AAB07329;

XX AC

XX 17-OCT-2000 (first entry)

XX DT

XX Human prion protein sequence.

XX DE

XX Human; prion protein; transmissible spongiform encephalopathy;

XX KW bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX KM

XX Homo sapiens.

XX OS

XX Key Location/Qualifiers

XX FH 29..69

XX FT /note= "Repeat region consisting of tandem repeats of

XX FT repeat unit: PHGGGWGQ (AAB07319)"

XX FT Disulfide-bond 157..192

XX FT Modified-site 208

XX FT /note= "C-terminal phospho-inositol glycolipid membrane

XX FT anchor (-GPI)"

XX PN

XX MO200029849-A1.

XX PD

XX 25-MAY-2000.

XX PF

XX 27-OCT-1999; 99WO-FI000896.

XX PR

XX 17-NOV-1998; 98FI-00002480.

XX PA (WALL-) WALLAC OY.

XX PA (BBSR-) BBSRC OFFICE.

XX PI Hope J, Barnard GJR, Birkett CR;

XX PT WPI; 2000-399778/34.

XX PS

XX New immunoassay for prion protein, used for determination of

XX PT transmissible spongiform encephalopathies in mammals, comprises specific

XX PT capture antibody.

XX PS Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

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this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a prion peptide is captured by an antibody, which is then detected. The presence of prp indicates TSE. prp epitopes (AAB07320-807326) are derived from the protease resistant core of prp that is occluded when the prp is in an aggregated state

Sequence 208 AA; 100.0%; Score 193; DB 5; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

RESULT 14
ABG31902 standard; protein; 208 AA.

ID ABG31902 standard; protein; 208 AA.
AC ABG31902; (first entry)

DT 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.
XX Prion; human; follicular dendritic cells; FDC; infection; disease.

XX Prion; human; follicular dendritic cells; FDC; infection; disease.
XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Homo sapiens.
XX MO200261418-A1.

XX 08-AUG-2002.
XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.
XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.
XX Kitamoto T, Miyoshi K, Mori S;

XX Kitamoto T, Miyoshi K, Mori S;
XX WPI; 2002-619277/66.

XX WPI; 2002-619277/66.
XX Screening (non-)human prion disease infection factor based on abnormal

XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.
XX This invention relates to a novel method for screening human or non-

XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)

XX human prion disease infection factor, which is applicable in safety tests
XX human prion disease infection factor, foods and cosmetics, and for developing
XX human prion disease preparations, foods and cosmetics of Creutzfeldt-Jacob

XX on drugs like blood preparations, foods and cosmetics of Creutzfeldt-Jacob
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The

XX present sequence represents a human prion related protein of the
XX invention
XX Sequence 208 AA; 100.0%; Score 193; DB 5; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

RESULT 15
ABG31904 standard; protein; 208 AA.

ID ABG31904 standard; protein; 208 AA.
AC ABG31904; (first entry)

DT 05-NOV-2002 (first entry)

XX Chimera-type prion protein #2.
XX Prion; human; follicular dendritic cells; FDC; infection; blood preparation;

XX Prion; human; follicular dendritic cells; FDC; infection; blood preparation;
XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Synthetic.
XX MO200261418-A1.

XX 08-AUG-2002.
XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.
XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.
XX Kitamoto T, Miyoshi K, Mori S;

XX Kitamoto T, Miyoshi K, Mori S;
XX WPI; 2002-619277/66.

XX WPI; 2002-619277/66.
XX Screening (non-)human prion disease infection factor based on abnormal

XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Claim 9; Page 55-57; 69pp; Japanese.
XX This invention relates to a novel method for screening human or non-

XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)

XX human prion disease infection factor, which is applicable in safety tests
XX human prion disease infection factor, foods and cosmetics, and for developing
XX human prion disease preparations, foods and cosmetics of Creutzfeldt-Jacob

XX on drugs like blood preparations, foods and cosmetics of Creutzfeldt-Jacob
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The

XX present sequence represents a chimera type prion related protein of the
XX invention
XX Sequence 208 AA; 100.0%; Score 193; DB 5; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Db 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

Query Match Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0;

Matches 36; Conservative 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36 151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 186

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : PIR 79: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	226	2 A53892	prion-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 UYHU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 I84423	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53635	prion protein - si
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	prion protein - go
25	193	100.0	254	2 A34759	prion protein - Ch
26	193	100.0	254	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S53137	prion protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 UYHYH	major prion PrP-Sc
32	188	97.4	256	2 UYH268	major prion protei
33	188	97.4	257	2 A23545	major prion PrP27-
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	prion protein - go
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 J01900	major prion protei
38	182	94.3	252	2 JC6175	prion protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-cRNA
42	53	27.5	267	1 UYCH	major prion protei
43	53	27.5	273	2 A37372	prion protein homo
44	53	27.5	273	2 A46280	prion protein - ch
45	53	27.5	346	2 B71496	tryptophan-cRNA 11

ALIGNMENTS

RESULT 1

A53892

prion-related protein - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A>Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889848

A/Accession: A53892

A>Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C:Superfamily: major prion protein

Query Match

Best Local Similarity 100.0%; Score 193; DB 2; Length 226;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 36

DB 145 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 180

RESULT 2

S71041 major prion protein - black-handed spider monkey (fragment)

C/Species: Atles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Scharzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G4743

R/Scharzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates.

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53630

A>Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-221 <SCH>

A/Cross-references: EMBL:U08309

C:Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4,1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 157 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 192

RESULT 3

major prion protein - Callicebus moloch (fragment)

C/Species: Callicebus moloch

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCM>

A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 166 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 201

RESULT 4

major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71056

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g4743

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCM>

A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 166 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 201

Db 166 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 201

RESULT 5

major prion protein - green monkey

C/Species: Cercopithecus aethiops (green monkey, grivet)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53627; S71043

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53627

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08291

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71043

A/Molecule type: DNA

A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCM>

A/Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 165 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 200

RESULT 6

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g47434

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCM>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 165 NNFFHDCVNITIKQHTVTTTGGNFETEDVKMER 200

RESULT 7

S53634

```

major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Scharzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53634; MUID:95139066; PMID:7837269
A:Accession: S53634
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Scharzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 36
|||||
Db 172 NNFVHDCVNITIKOHTVTTTNGENFETDVKMMER 207

RESULT 9
UHHU
major prion protein precursor - human
N:Alternate names: 11k amyloid protein, 27-30K sialoglycoprotein; PrP 27-30; PrP 33-35C;
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A44173; A403017; A405017; S144078; I54322; I68537; I58135; I58184; I79633; I797

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DNA 5, 315-324, 1986
A>Title: Molecular cloning of a human prion protein cDNA.
A.Reference number: A24173; MUID:86300093; PMID:3755672
A.Accession: A24173
A:Molecule type: mRNA
A.Residues: 1-253 <KRE>
A.Cross-references: UNIPROT:P04156; GB:MJ3899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R.Puckett, C.; Concamon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A>Title: Genomic structure of the human prion protein gene.
A.Reference number: A40372; MUID:91328137; PMID:1678248
A.Accession: A40372
A>Status: not compared with conceptual translation
A:Molecule type: DNA
A.Residues: 1-80,89-253 <PUC>
A.Cross-references: GB:X83416; NID:g747846; PIDN:CMA58442.1; PID:g747847
R.Tadilavini, F.; Prelli, F.; Ghisio, V.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A>Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A.Reference number: S14078; MUID:91160504; PMID:1672107
A.Accession: S14078
A:Molecule type: protein
A.Residues: 58-72,'X','74-76,'XX','79,'XXX',83-86,111-128,'V',130-150 <TAG>
R.Diedrich, U.F.; Knopman, D.S.; List, U.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A.Reference number: I54322; MUID:93250789; PMID:1363802
A.Accession: I54322
A>Status: preliminary; translated from GB/EBML/DDBJ
A:Molecule type: DNA
A.Residues: 9-83,92-240 <RES>
A.Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A.Accession: I68597
A>Status: translated from GB/EBML/DDBJ
A:Molecule type: DNA
A.Residues: 8-240 <RES>
A.Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R.Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A.Reference number: I58135; MUID:92140671; PMID:1736177
A.Accession: I58135
A>Status: preliminary; translated from GB/EBML/DDBJ
A:Molecule type: DNA
A.Residues: 51-91,'PHGGGWMGPQHPGHGGWGOHPHGGMOPHGGWGMPHHGG' <REG>
A.Cross-references: GB:S88539; NID:g244698; PIDN:AAB2133.1; PID:g244699
R.Goldfard, L.G.; Brown, P.; McCombie, W.R.; Goldgaber, D.; Swergar, G.D.; Willie, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jacob disease associated with five, seven, or
A.Reference number: I59184; MUID:92073400; PMID:1683708
A.Accession: I59184
A.Status: translated from GB/EBML/DDBJ
A:Molecule type: DNA
A.Residues: 60-67 <COL>
A.Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID
C.Genetic:
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:intons: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIG>
 F/23-230/Product: major prion protein #status predicted <MAT>
 F/54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
 F/231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F/119-214/Dissulfide bonds: #status predicted
 F/161,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F/230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 10

major prion protein - stump-tailed macaque
 C/Species: Macaca arctoides (stump-tailed macaque)
 C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53624; S71051
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53624
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08311
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71051
 A/Molecule type: DNA
 A/Residues: 1-210, 'E', 212-253 <SCM>
 A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS0099.1; PID:9475584
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 11

major prion protein - crab-eating macaque
 C/Species: Macaca fascicularis (crab-eating macaque)
 C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53623; S71052
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53623
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08298
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71052
 A/Molecule type: DNA
 A/Residues: 1-210, 'E', 212-253 <SCM>
 A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 12

major prion protein - hamadryas baboon
 C/Species: Papio hamadryas (hamadryas baboon)
 C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
 C/Accession: S53620; S71058
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53620
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08294
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71058
 A/Molecule type: DNA
 A/Residues: 1-210, 'E', 212-253 <SCM>
 A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 13

major prion protein - Japanese macaque
 C/Species: Macaca fuscata (Japanese macaque)
 C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C/Accession: S53625; S71053
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53625
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: UNIPROT:P40254; EMBL:U08301
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71053
 A/Molecule type: DNA
 A/Residues: 1-210, 'E', 212-253 <SCM>
 A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4,5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 ||||||||||||||||||||||||||||||||||||
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004.

C:Accession: I84423; S53622; S71054

R:Schaezel, H.M.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; MUID:95083661; PMID:7991600

A:Accession: I84423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:9595850; PIDN:AAA68635.1; PID:95958

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71054

A:Reference number: S71041

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 ||||||||||||||||||||||||||||||||||||
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCH>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
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 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:41

Job time: 10.8 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28, Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITTKQHTTTTGTGKENTETDVKKMER 36

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt_02:*
1: UniProt_sprot:*
2: UniProt_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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3	193	100.0	238	1	P40246 cerceobus
4	193	100.0	238	2	086XN1 cerceobus
5	193	100.0	240	2	086XN1 cerceobus
6	193	100.0	241	1	P40248 cerceobus
7	193	100.0	241	1	P40255 cerceobus
8	193	100.0	245	1	P40250 cerceobus
9	193	100.0	246	1	P40250 cerceobus
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14	193	100.0	248	2	AA083636 cerceobus
15	193	100.0	252	1	P40249 cerceobus
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25	193	100.0	253	1	P40251 cerceobus
26	193	100.0	253	2	06FGR8 cerceobus
27	193	100.0	253	2	06FGR8 cerceobus
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29	193	100.0	253	2	06FGR8 cerceobus
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31	193	100.0	254	1	P40251 cerceobus

32	193	100.0	254	1	P40246 ateles geof	Q60468 cerceobus
33	193	100.0	254	1	P40246 cerceobus	P04925 mus musculus
34	193	100.0	254	1	P40246 cerceobus	P13852 ratus norvegicus
35	193	100.0	254	1	P40246 cerceobus	Q920C3 sigmodon fuliginosus
36	193	100.0	254	2	0920T4 sigmodon fuliginosus	Q920T4 sigmodon fuliginosus
37	193	100.0	254	2	0920T4 sigmodon fuliginosus	Q920T4 sigmodon fuliginosus
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ALIGNMENTS

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AC	P40246				
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DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	05-UTL-2004 (Rel. 44, Last annotation update)				
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).				
GN	Name=PRP				
OS	Ateles Geoffroyi (Black-handed spider monkey).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.				
OX	NCBI_TaxID=9509;				
RN	[1]				
RX	SEQUENCE FROM N.A.				
RA	MEDLINE=95139066; PubMed=7837269;				
RT	Schaezel H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RL	"Prion protein gene variation among primates."				
CC	J. Mol. Biol. 245:362-374(1995).				
CC	- FUNCTION: The function of Prp is not known. Prp is encoded in the				
CC	host genome and is expressed both in normal and infected cells.				
CC	- SUBUNIT: Prp has a tendency to aggregate yielding polymers called				
CC	"rods".				
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	- DISEASE: Prp is found in high quantity in the brain of humans and				
CC	animals infected with the degenerative neurological diseases kuru,				
CC	Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome				
CC	(GSS), scrapie, bovine spongiform encephalopathy (BSE),				
CC	transmissible mink encephalopathy (TME), etc.				
CC	- SIMILARITY: Belongs to the prion family.				
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CC	the European Bioinformatics Institute. There are no restrictions on its				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/				
CC	or send an email to license@isb-sib.ch).				
DR	EMBL; U08309; AAC50097.1; -				
DR	PIR; S71041; S71041.				
DR	HSSP; P23907; 1G04.				
DR	InterPro; IPR000817; Prion.				
DR	Pfam; PF00377; Prion; 1.				
DR	Pfam; PF03991; Prion octapep; 5.				
DR	PRINTS; PR00341; PRION.				
DR	PROSITE; PS00029; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
KW	Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.				
FT	NON_TER	1			
FT	SIGNAL	<1	15		By similarity.
FT	CHAIN	16	214		Major prion protein.
FT	PROPEP	215	>232		Removed in mature form (By similarity).
FT	LIPID	214	214		GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity.
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON_TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5.2e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 36
Db 157 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 192

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecidae;
OC NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75384; AAB50623.1; -
DR EMBL; U75382; AAB50623.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion.octapep; 5.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E331B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 36
Db 158 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 193

RESULT 3
PRIO_THREE STANDARD; PRT; 238 AA.
ID PRIO_THREE
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PrP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecidae;
OC NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75383; AAB50630.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion.octapep; 5.
DR PROSITE; PS00291; PRION_1; 1.

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DR PROSITE: PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 FT Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 215 Major prion protein.
 FT PROPEP 216 >238 Removed in mature form (By similarity).
 FT DISULFID 164 199 By similarity.
 FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
 FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 83 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26104 MW; 5F5BFF602243EDB CRC64;
 Query Match 100.0%; Score 193; DB 1; Length 238;
 Best Local Similarity 100.0%; Pred. No. 5.3e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193
 RESULT 4
 Q86XR1 PRELIMINARY; PRT; 238 AA.
 ID Q86XR1
 AC Q86XR1
 DT 01-JUN-2003 (TREMBLrel. 24, Created)
 DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PRNP;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OC NCBI_TaxID=9606;
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AY219882; AAC83635.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 238;
 Best Local Similarity 100.0%; Pred. No. 5.3e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193
 RESULT 5
 Q8VHV4 PRELIMINARY; PRT; 240 AA.
 ID Q8VHV4
 AC Q8VHV4;

DT 01-MAR-2002 (TREMBLrel. 20, Created)
 DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prp;
 OS Microtus agrestis (Short-tailed field vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Microtus
 NCBI_TaxID=29092;
 OX NCBI_TaxID=29092;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367625; AAL57232.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 240 240
 SQ SEQUENCE 240 AA; 26308 MW; BCAEDD3F5F76693 CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 240;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 200
 RESULT 6
 PRIO_CALMO STANDARD; PRT; 241 AA.
 ID PRIO_CALMO
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Callitricus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitricinae;
 OC Callitricus.
 OC NCBI_TaxID=9523;
 OX NCBI_TaxID=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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DR EMBL, U08312; AAC50100.1; -.
 DR PIR; S71048; S71048.
 DR HSP; P23907; 1G04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR GlycoProtein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KM Signal.
 FT SIGNAL 1 1
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 >241 Major prion protein.
 FT DISULFID 172 207 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT CARBOHYD 174 174 similarity).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 FT REPEAT 44 52 5 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 53 60 0.
 FT REPEAT 61 68 1.
 FT REPEAT 69 76 2.
 FT REPEAT 77 84 3.
 FT NON_TER 241 241 4.
 FT SEQUENCE 241 AA; 26373 MW; C6D2013BETCAEC93 CRC64; 5.

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 201

RESULT 7
 PRIO_MANSP STANDARD; PRT; 241 AA.
 ID P40255;
 AC 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrill; sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 NCBI_Taxid=9561;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL, U08303; AAC50091.1; -.
 DR PIR; S71056; S71056.
 DR HSP; P23907; 1G04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR GlycoProtein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KM NON_TER 1 1
 FT SIGNAL 1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT DISULFID 172 207 similarity).
 FT CARBOHYD 174 174 By similarity.
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 FT REPEAT 44 52 5 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 53 60 0.
 FT REPEAT 61 68 1.
 FT REPEAT 69 76 2.
 FT REPEAT 77 84 3.
 FT NON_TER 241 241 4.
 FT SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64; 5.

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 201

RESULT 8
 PRIO_CERAB STANDARD; PRT; 245 AA.
 ID P40250;
 AC 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OC Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_Taxid=9534, 36224;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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CC      "rodg".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyrighted. It is produced through a collaboration
CC      between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC      the European Bioinformatics Institute. There are no restrictions on its
CC      use by non-profit institutions as long as its content is in no way
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U08291; AAC50080.1; -.
DR      EMBL: U08292; AAC50081.1; -.
DR      PIR: S53627; S53627.
DR      PIR: S71045; S71045.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      Pfam: PR00391; Prion, octapep; 5.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KM      GLYCOPROTEIN: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 22
FT      CHAIN 23 222
FT      PROPEP 223 245
FT      LIPID 222 222
FT      DISULFID 171 206
FT      CARBOHYD 173 173
FT      CARBOHYD 189 189
FT      DOMAIN 51 83
FT      REPEAT 51 59
FT      REPEAT 60 67
FT      REPEAT 68 75
FT      REPEAT 76 83
SQ      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db      165 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 200

RESULT 9
PRIO CERNO STANDARD; - PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCB1_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."

```

```

RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rodg".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U75386; AAB50625.1; -.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      Pfam: PR00391; Prion, octapep; 6.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KM      NON TER 1 1
FT      SIGNAL <1 15
FT      CHAIN 16 223
FT      PROPEP 224 246
FT      LIPID 223 223
FT      DISULFID 172 207
FT      CARBOHYD 174 174
FT      CARBOHYD 190 190
FT      DOMAIN 44 84
FT      REPEAT 44 52
FT      REPEAT 53 60
FT      REPEAT 61 68
FT      REPEAT 69 76
FT      REPEAT 77 84
SQ      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db      166 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 201

RESULT 10
PRIO CERNE STANDARD; PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCB1_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

```

RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75387; AAB50626.1; -.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION_1; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FD3 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 36
Db 166 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 201

```

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OK NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75385; AAB50628.1; -.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION_1; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 26914 MW; F58679CBBEC5AD7 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 36
Db 166 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 201

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RESULT 12
PRT: 246 AA.
AC 095174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
GN Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Carnivora; Canidae;
OC Cercopithecinae; Cercopithecus.

```


CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecoidea; Erythrocebus.
 CC NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.,
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: U75388; AAB50627.1; --
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223 By similarity.
 CC FT PROPEP 224 246 Major prion protein.
 CC FT LIPID 223 223 Removed in mature form (By similarity).
 CC FT DISULFID 172 207 GPI-anchor amidated serine (By
 CC FT CARBOHYD 174 174 similarity).
 CC FT CARBOHYD 190 190 By similarity.
 CC FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 CC FT REPEAT 44 52 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 CC FT REPEAT 53 60 1.
 CC FT REPEAT 61 68 2.
 CC FT REPEAT 69 76 3.
 CC FT REPEAT 77 84 4.
 CC FT REPEAT 84 84 5.
 CC SQ SEQUENCE 246 AA; 26884 MW; D3SD105BEC53108 CRC64;
 QY Query Match 100.0%; Score 193; DB 1; Length 246;
 Db Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
 Db 166 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 201
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TREMBlrel. 27, Created)
 DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
 DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 CC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.,
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC EMBL: AY219883; AAO83636.1; --
 CC Prion.
 CC FT NON_TER 1 1
 CC FT NON_TER 246 246
 CC SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
 QY Query Match 100.0%; Score 193; DB 2; Length 246;
 Db Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
 Db 166 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 201
 RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Cetheironomys glareolus (Bank vole).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC Clethrionomys.
 CC NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.,
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL: AF367624; AAL57231.1; --
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC DR PROSITE: PS00291; PRION_1; 1.
 CC DR PROSITE: PS00706; PRION_2; 1.
 CC KMW Prion.
 CC FT NON_TER 248 248
 CC SQ SEQUENCE 248 AA; 27259 MW; 815B64BCD2773C2C CRC64;
 QY Query Match 100.0%; Score 193; DB 2; Length 248;
 Db Best Local Similarity 100.0%; Pred. No. 5.6e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 36
 Db 173 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMER 208
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Callitrichus jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrich.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U08304; AAC50092.1; -
DR PIR: S53634; S53634.
DR HSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PRO0341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MM; B2800B60F5CE664 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5,7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFFVDCVNIITIKOHTVTTTNGENFTETDVKMER 36
|||
172 NNFFVDCVNIITIKOHTVTTTNGENFTETDVKMER 207

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Search completed: December 3, 2004, 00:35:31
 Job time : 58.1902 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*
1: /cgn2_6/ptodata/1/iaa/5A.COMB.dep.*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.dep.*
3: /cgn2_6/ptodata/1/iaa/6A.COMB.dep.*
4: /cgn2_6/ptodata/1/iaa/6B.COMB.dep.*
5: /cgn2_6/ptodata/1/iaa/PCUTUS.COMB.dep.*
6: /cgn2_6/ptodata/1/iaa/backfilest.dep.*

Pred: No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10
2	193	100.0	245	4	US-09-431-887-5
3	193	100.0	245	4	US-09-431-887-15
4	193	100.0	252	4	US-09-431-887-13
5	193	100.0	252	4	US-09-431-887-17
6	193	100.0	253	1	US-08-242-188-2
7	193	100.0	253	1	US-08-509-261A-2
8	193	100.0	253	1	US-08-660-626-8
9	193	100.0	253	1	US-08-692-892-2
10	193	100.0	253	2	US-08-713-939A-2
11	193	100.0	253	2	US-08-868-162A-22
12	193	100.0	253	3	US-09-031-168-8
13	193	100.0	253	3	US-09-128-458-20
14	193	100.0	253	3	US-09-036-579-2
15	193	100.0	253	3	US-09-823-494-20
16	193	100.0	253	3	US-09-550-374-2
17	193	100.0	253	4	US-09-431-887-1
18	193	100.0	253	4	US-09-431-887-2
19	193	100.0	253	4	US-09-431-887-3
20	193	100.0	253	4	US-09-431-887-4
21	193	100.0	253	4	US-09-431-887-7
22	193	100.0	253	4	US-09-431-887-8
23	193	100.0	253	4	US-09-431-887-9
24	193	100.0	253	4	US-09-431-887-10
25	193	100.0	253	4	US-09-431-887-11
26	193	100.0	253	4	US-09-431-887-12
27	193	100.0	253	4	US-09-431-887-14

28	193	100.0	253	4	US-09-431-887-16	Sequence 16, Appl
29	193	100.0	253	4	US-09-431-887-18	Sequence 18, Appl
30	193	100.0	253	4	US-09-431-887-19	Sequence 19, Appl
31	193	100.0	253	4	US-09-943-906-2	Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8	Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57	Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72	Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3	Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1	Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1	Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7	Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1	Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1	Sequence 1, Appl
41	193	100.0	254	2	US-08-868-162A-21	Sequence 21, Appl
42	193	100.0	254	3	US-09-031-168-7	Sequence 7, Appl
43	193	100.0	254	3	US-09-128-450-19	Sequence 19, Appl
44	193	100.0	254	3	US-09-128-450-28	Sequence 28, Appl
45	193	100.0	254	3	US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10

Sequence 10, Application US/08556823

Patent No. 5750361

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko

TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Ascii

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556, 823

FILING DATE:

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;

Best Local Similarity 100.0%; Pred. No. 7, 4e-20;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMER 36
|||
Db 84 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMER 119

RESULT 2
US-09-431-887-5
Sequence 5, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431.887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 5
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 200

RESULT 3
US-09-431-887-15
Sequence 15, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431.887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 15
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 200

RESULT 4
US-09-431-887-13
Sequence 13, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431.887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
LENGTH: 252
TYPE: PRT
ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 207

RESULT 5
US-09-431-887-17
Sequence 17, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431.887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 17
LENGTH: 252
TYPE: PRT
ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 207

RESULT 6
US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Boslcevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188

FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
TOPOLOGY: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP

US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP

US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMR 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTION OF PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/06/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVYKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVYKMMR 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVYKMMR 36
Db 173 NNFVHDCVNITIKQHTVTTTGGENFTETDVYKMMR 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 36
|||||
Db 173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 208

RESULT 15
US-09-823-494-20

; Sequence 20, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susele
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-06-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 36
|||||
Db 173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 208

Search completed: December 3, 2004, 00:18:58
Job time : 13.6328 secs

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 2
US-10-050-898-348

/ Sequence 348, Application US/10050898
/ Publication No. US20030175711A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisroc, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Seibel, Peter
/ APPLICANT: Ploesek, Christine
/ APPLICANT: Ortman, Rainer
/ APPLICANT: Luond, Rainer
/ APPLICANT: Stauffendel, Matthias
/ APPLICANT: Frey, Peter
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700.0190005
/ CURRENT APPLICATION NUMBER: US/10/050,898
/ PRIOR FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
/ PRIOR APPLICATION NUMBER: US 60/288,549
/ PRIOR FILING DATE: 2001-05-04
/ PRIOR APPLICATION NUMBER: US 60/326,998
/ PRIOR FILING DATE: 2001-10-05
/ PRIOR APPLICATION NUMBER: US 60/331,045
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 350
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 348
/ LENGTH: 117
/ TYPE: PRT
/ ORGANISM: Artificial sequence
/ FEATURE:
/ OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 3
US-10-346-190-89

/ Sequence 89, Application US/10346190
/ Publication No. US20030219459A1
/ GENERAL INFORMATION:
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Pelliccioli, Erica
/ APPLICANT: Renner, Wolfgang A.
/ TITLE OF INVENTION: Prion Protein Carrier-Conjugates
/ FILE REFERENCE: 1700.0290003
/ CURRENT APPLICATION NUMBER: US/10/346,190
/ PRIOR FILING DATE: 2003-01-17
/ PRIOR APPLICATION NUMBER: 60/396,590
/ PRIOR FILING DATE: 2002-07-18
/ PRIOR APPLICATION NUMBER: 60/393,725
/ PRIOR FILING DATE: 2002-07-08
/ PRIOR APPLICATION NUMBER: 60/389,898
/ PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166

/ PRIOR FILING DATE: 2002-01-21
/ PRIOR APPLICATION NUMBER: 10/050,902
/ PRIOR FILING DATE: 2002-01-18
/ NUMBER OF SEQ ID NOS: 164
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 89
/ LENGTH: 117
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 4
US-10-050-902-324

/ Sequence 324, Application US/10050902
/ Publication No. US20030175290A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisroc, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Seibel, Peter
/ APPLICANT: Ploesek, Christine
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700.0190004
/ CURRENT APPLICATION NUMBER: US/10/050,902
/ PRIOR FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
/ PRIOR APPLICATION NUMBER: US 60/288,549
/ PRIOR FILING DATE: 2001-05-04
/ PRIOR APPLICATION NUMBER: US 60/326,998
/ PRIOR FILING DATE: 2001-10-05
/ PRIOR APPLICATION NUMBER: US 60/331,045
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 350
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 324
/ LENGTH: 124
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: mPrpC construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 53 NNFFVHDCVNITIKOHTVTTTGGNFETEDVKMER 88

RESULT 5
US-10-050-898-324

/ Sequence 324, Application US/10050898
/ Publication No. US20030175711A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin

APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/356,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Laubs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PIP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 82 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 193; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 6,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 63 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PPT2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 193; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 193; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 8,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36

DB 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 178

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 193; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040209131A1
; GENERAL INFORMATION:
; APPLICANT: Scholz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptide/prolyl isomerase;
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 193; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 186

RESULT 14

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US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

```

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Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

```

```

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-7

```

```

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

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QY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

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 Job time : 43.6098 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52, Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITTKQHTVTITTKGSEPTEDVYKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database: A_Geneseq_23Sep04.*

1: geneeqp1980s.*
2: geneeqp1990s.*
3: geneeqp2000s.*
4: geneeqp2001s.*
5: geneeqp2002s.*
6: geneeqp2003as.*
7: geneeqp2003bs.*
8: geneeqp2004s.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	5	ABG94357 Modified
2	211	100.0	117	5	ABG80669 Human pri
3	211	100.0	117	7	ADD24196 Modified
4	211	100.0	124	5	ABG94340 Mouse mpr
5	211	100.0	124	5	ABG80652 Mouse tru
6	211	100.0	124	7	ADD24200 mPrPr-EK-
7	211	100.0	142	7	AAW17686 Prion pro
8	211	100.0	163	7	ADB63859 Human pro
9	211	100.0	200	5	ABG31907 Human pri
10	211	100.0	208	3	AAW07316 Human pri
11	211	100.0	208	3	AAW07318 Human pri
12	211	100.0	208	3	AAW07327 Mouse pri
13	211	100.0	208	5	AAW07329 Human pri
14	211	100.0	208	5	ABG31902 Human pri
15	211	100.0	208	5	ABG31904 Chimera-t
16	211	100.0	208	7	ADB6133 Mouse pri
17	211	100.0	209	5	ABG31905 HCHV type
18	211	100.0	211	4	AAW30801 Amino aci
19	211	100.0	225	6	ABR42793 Rat prion
20	211	100.0	226	7	ADB85240 Rat prion
21	211	100.0	245	4	AAW72342 Monkey pr
22	211	100.0	245	4	AAW72352 Cercopit
23	211	100.0	253	2	AAW65715 Human pri
24	211	100.0	253	2	AAW69660 Human pri
25	211	100.0	253	2	AAW85901 Human pri

26	211	100.0	253	2	AAW07994 Human pri
27	211	100.0	253	3	AAW81485 Human pri
28	211	100.0	253	3	AAW06272 Human pri
29	211	100.0	253	3	AAW15035 Human pri
30	211	100.0	253	4	AAW72339 Chimpanze
31	211	100.0	253	4	AAW72347 Prion pro
32	211	100.0	253	4	AAW72353 Rhesus mo
33	211	100.0	253	4	AAW72345 Gibbon pr
34	211	100.0	253	4	AAW72350 Marmoset
35	211	100.0	253	4	AAW72351 Hamadryas
36	211	100.0	253	4	AAW72348 Prion pro
37	211	100.0	253	4	AAW72356 Stiamang p
38	211	100.0	253	4	AAW72346 Prion pro
39	211	100.0	253	4	AAW72355 Prion pro
40	211	100.0	253	4	AAW72349 Prion pro
41	211	100.0	253	4	AAW72340 Orangutan
42	211	100.0	253	4	AAW72338 Human pri
43	211	100.0	253	4	AAW72354 Capuchin
44	211	100.0	253	4	AAW72341 Gorilla p
45	211	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID AEG94357 standard; protein; 117 AA.
XX
AC AEG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-031045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisoeot A, Maurer P, Lechner F, Sebbel P;
PI Plossek C;
XX
WP1; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX

This invention relates to a novel ordered and repetitive antigen array
used in the production of vaccines for infectious diseases. The invention
also discloses a composition comprising a non-natural molecular scaffold
comprising a core particle selected from a core particle of a non-natural
origin and a core particle of natural origin and an organism comprising
at least one first attachment site, where the organism is connected to
the core particle by at least one covalent bond. Also disclosed is an
antigen or antigenic determinant with at least one second attachment
site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abetal-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Obeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cyostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;

Best Local Similarity 100.0%; Pred. No. 1.4e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETTDVKMERVVEQ 40
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETTDVKMERVVEQ 91

RESULT 2

ABG80669
 ID ABG80669 standard; protein; 117 AA.

AC ABG80669;

DT 29-NOV-2002 (first entry)

XX Human prion protein/cysteine-containing peptide fusion protein.

KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutan;
 KM graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002.

21-JAN-2002; 2002WO-1B000168.

PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOECHOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR/) MAURER P.

PA (LECH/) LECHNER F.

PA (ORTM/) ORTMANN R.

PA (LUEO/) LUEOEND R.

PA (STAU/) STAUFENBIEL M.

PA (FREY/) FREY P.

XX Maurer P, Lechner F, Ortman R, Lueoend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisot A, Seibel P, Piossek C;
 XX WPI, 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1i) an antigen comprising at least one first attachment
 CC site, where the antigen is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1i) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;

Best Local Similarity 100.0%; Pred. No. 1.4e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETTDVKMERVVEQ 40
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETTDVKMERVVEQ 91

RESULT 3

ADD24196
 ID ADD24196 standard; protein; 117 AA.

AC ADD24196;

DT 15-JAN-2004 (first entry)

XX Modified human prion protein amino acid sequence.

KM Vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mutant; mutein.

XX Synthetic.

OS Prion.

PN WO2003059386-A2.

PD 24-JUL-2003.
XX
XX 17-JAN-2003; 2003WO-EP000460.
XX
XX 18-JAN-2002; 2002US-00050902.
PR 21-JAN-2002; 2002WO-IB000166.
PR 08-JUL-2002; 2002US-0393725P.
PR 18-JUL-2002; 2002US-0396590P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX WPI; 2003-598483/56.
XX
XX A vaccine composition for preventing or treating prion diseases (e.g.
PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
PT phage) and at least one prion protein or peptide bound to the virus-like
PT particle.
XX
XX Disclosure; SEQ ID NO 89; 246bp; English.
XX
XX This invention relates to a novel vaccine composition comprising a virus-
CC like or a core particle with at least one first attachment site and at
CC least one antigen or antigenic determinant that is a prion protein (PrP)
CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
CC being bound to the virus-like or core particle. The vaccine of the
CC invention may have neuroprotective or antiinflammatory activity. The
CC composition is useful as a medicament or in manufacturing a medicament
CC for the treatment or prevention of prion diseases. The prion diseases may
CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
CC Disease. The present sequence is the amino acid sequence of a modified
CC human prion protein (PrP) which may be used during the creation of the
CC vaccine composition of the invention.
XX
SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 7; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 91

RESULT 4
ABG94340
ID ABG94340 standard; protein; 124 AA.
XX
XX ABG94340;
XX
XX 10-DEC-2002 (first entry)
XX
XX Mouse mPrPc protein.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KM vaccine; infectious disease.
XX
XX Mus sp.
XX
XX WO200256905-A2.
XX
XX 25-JUL-2002.
XX
XX 21-JAN-2002; 2002WO-IB000166.
XX
XX 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326988P.
PR 07-NOV-2001; 2001US-0331045P.
XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tiesoc A, Maurer P, Lechner F, Sebbel P;
PI Plosek C;
XX
XX WPI; 2002-627351/67.
XX
XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
XX Disclosure; Page 438; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (A β 1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and
CC repeatitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant Qbeta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytosolic, used in
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention
XX
SQ Sequence 124 AA;

Query Match 100.0%; Score 211; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 5
ABG80652
ID ABG80652 standard; protein; 124 AA.
XX
XX ABG80652;
XX
XX 29-NOV-2002 (first entry)
XX
XX Mouse truncated prion protein with C terminal cysteine containing linker.
XX
XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutant;
KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
KM adult respiratory distress syndrome; AIDS; Crohn's disease;
KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KM Grave's disease; systemic lupus erythematosus; osteoporosis;
KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
KM angiotensinogenolytic lymphadenopathy; immunoblastic lymphadenopathy;
KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
KM enterokinase; cysteine-containing linker.
XX
XX Mus sp.
XX
XX Synthetic.
XX

PN W0200256907-A2.
 XX 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002MO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C,
 XX MPI, 2002-636514/68.
 XX
 DR Molecular antigen array used in the production of vaccines for infectious
 XX diseases.
 PT
 PT Example 7; Page 415; 418pp; English.
 XX
 XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, TGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Graves' disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, myasthenia
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 XX Sequence 124 AA;
 SQ
 Qy Query Match 100.0%; Score 211; DB 5; Length 124;
 Bcst Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 92

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 XX ADD24200;
 AC
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrPt-EK-Fc* cleaved protein sequence.
 XX
 XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP^{Sc} peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 XX Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.
 XX
 OS unidentified.
 OS
 OS prion.
 XX
 PN W02003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003MO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX MPI; 2003-598483/56.
 DR
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Example 13; SEQ ID NO 93; 246pp; English.
 PS
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 XX Sequence 124 AA;
 SQ
 Qy Query Match 100.0%; Score 211; DB 7; Length 124;
 Bcst Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 92
 RESULT 7
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KW scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KW Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX Homo sapiens.
 OS
 XX MO9716728-A1.
 PN
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96MO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556623.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Prusiner SB, Kaneko K, Cohen FE;
 PI
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11, Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFWHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 84 NNFWHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX ADB63859;
 AC
 XX 04-DEC-2003 (first entry)
 DT
 XX Human protein encoded by clone ASTR020055570.
 DE
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KW cell regeneration; membrane protein; signal transduction-related protein;
 KW transcription-related protein; osteoporosis; neurological disease;
 KW cancer; tumour.
 XX Homo sapiens.
 OS
 XX EP1308459-A2.
 PN
 XX 07-MAY-2003.
 PD
 XX 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001UP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Iogaki T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1, Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours). The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX
 SQ Sequence 163 AA;
 Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFWHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 83 NNFWHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX ABG31907;
 AC
 XX 05-NOV-2002 (first entry)
 DT
 XX Human prion protein related peptide #6.
 DE
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 KW Homo sapiens.
 OS
 XX WO200261418-A1.
 PN
 XX 08-AUG-2002.
 PD
 XX

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XX 31-JAN-2002; 2002MO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO) UNIV TOHOKU.
XX
XX Kitamoto T, Miyoshi K, Mohri S,
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention
XX
XX Sequence 200 AA;
XX
XX Query Match 100.0%; Score 211; DB 5; Length 200;
XX Best Local Similarity 100.0%; Pred. No. 2.5e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
XX 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 182
XX
XX RESULT 10
XX AAB07316
XX ID AAB07316 standard; protein; 208 AA.
XX
XX AAB07316;
XX
XX 17-OCT-2000 (first entry)
XX
XX Mouse prion protein sequence.
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 156..191
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
XX
XX Query Match 100.0%; Score 211; DB 3; Length 208;
XX Best Local Similarity 100.0%; Pred. No. 2.6e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
XX 150 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 189
XX
XX AAB07318
XX ID AAB07318 standard; protein; 208 AA.
XX
XX AAB07318;
XX
XX 17-OCT-2000 (first entry)
XX
XX Human prion protein sequence.
XX
XX Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Region 29..69
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 157..192
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX

```

PT transmissible spongiform encephalopathies in bovines.
 XX Disclosure; Page 43-44; 50pp; English.
 PS
 XX
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SO Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
 DB 151 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 150
 RESULT 12
 AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KM Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT 37..68
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 PD 25-MAY-2000.
 PD
 XX 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 41-42; 50pp; English.
 XX
 CC The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SO Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
 DB 150 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 189
 RESULT 13
 AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KM Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT 29..69
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 PD 25-MAY-2000.
 PD
 XX 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40
 DB 151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

RESULT 14

ID ABB31902 standard; protein; 208 AA.

AC ABB31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CUD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX W020026148-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CUD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 CC

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40
 DB 151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

RESULT 15

ID ABB31904 standard; protein; 208 AA.

AC ABB31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection; blood preparation;
 KW food; cosmetic; CUD; Creutzfeldt-Jacob disease.

OS Synthetic.

XX W020026148-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Claim 9; Page 55-57; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CUD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 CC

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40
 DB 151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

Search completed: December 3, 2004, 00:55:40
 Job time : 66.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	226	2 A53892	p1on-related prot
2	211	100.0	232	2 S71041	major p1on protei
3	211	100.0	241	2 S71048	major p1on protei
4	211	100.0	241	2 S71056	major p1on protei
5	211	100.0	245	2 S71045	major p1on protei
6	211	100.0	253	1 UJHU	major p1on protei
7	211	100.0	253	2 I84423	major p1on protei
8	211	100.0	253	2 S71055	major p1on protei
9	211	100.0	253	2 S53635	p1on protei - si
10	211	100.0	253	2 I37032	major p1on protei
11	211	100.0	253	2 I61847	major p1on protei
12	211	100.0	254	2 B34759	p1on protei - go
13	211	100.0	254	2 A34759	p1on protei - Ch
14	211	100.0	254	2 A23544	major p1on protei
15	210	99.5	252	2 I61848	major p1on protei
16	209	99.1	264	2 S71137	p1on protei - gr
17	206	97.6	245	2 S53627	major p1on protei
18	206	97.6	252	2 S53634	major p1on protei
19	206	97.6	252	2 S53631	major p1on protei
20	206	97.6	253	2 S53624	major p1on protei
21	206	97.6	253	2 S53623	major p1on protei
22	206	97.6	253	2 S53620	major p1on protei
23	206	97.6	253	2 S53625	major p1on protei
24	206	97.6	253	2 S53617	major p1on protei
25	206	97.6	253	2 S53614	major p1on protei
26	206	97.6	253	2 S53616	major p1on protei
27	206	97.6	253	2 S53618	major p1on protei
28	206	97.6	253	2 S53619	major p1on protei
29	206	97.6	254	1 UJHYTH	major p1on prp-Sc

30	206	97.6	256	2 JU0268	major p1on protei
31	206	97.6	257	2 A23545	major p1on prp27-
32	206	97.6	264	2 A54330	major p1on protei
33	205	97.2	256	2 S57149	p1on protei - go
34	205	97.2	256	2 A54281	major p1on protei
35	205	97.2	260	2 S53629	major p1on protei
36	203	96.2	257	2 JU01900	major p1on protei
37	202	95.7	239	2 S53633	major p1on protei
38	200	94.8	252	2 UC6175	p1on protei - ra
39	61	28.9	267	1 UJCH	major p1on protei
40	61	28.9	267	2 A37372	p1on protei homo
41	61	28.9	273	2 A46280	p1on protei - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amyloidp1ulinase (
44	56	26.5	511	2 C69199	phenylalanine-cRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1
A53892
p1on-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C/Accession: A53892 Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
R/Liao, Y.C.; Tokens
Lab. Invest. 57, 370-374, 1987
A/Title: Cloning of rat "p1on-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:2889848
A/Accession: A53892
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-226 <L1A>
A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major p1on protein

Query Match 100.0%; Score 211; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 8.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMERVVEQ 40
Db 145 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMERVVEQ 184

RESULT 2

S71041
major p1on protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71041; S53630
R/Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437;
R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: P1on protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53630
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major p1on protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; p1on; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
|||||

DB 157 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 196
|||||

RESULT 3

major prion protein - Callipebus moloch (fragment)

C:Species: Callipebus moloch

C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71048; S53632

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A>Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
|||||

DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 205
|||||

RESULT 4

major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)

C:Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71056; S53621

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g4743

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A>Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
|||||

DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 205
|||||

RESULT 5

major prion protein - Cercopithecus diana

C:Species: Cercopithecus diana

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71045; S53628

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g47434

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A>Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>

A:Cross-references: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 9.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
|||||

DB 165 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 204
|||||

RESULT 6

major prion protein precursor - human

N:Alternate names: 11K amyloid protein; 27-30K sinaioglycoprotein; PrP 27-30; PrP 33-35C;

C:Species: Homo sapiens (man)

C:Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C:Accession: A24173; A40372; A05017; S14078; I58597; I59184; I79633; I796

R:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Studdieble, W.H.; Prusiner, S.B.; De

DNA 5, 315-324, 1986

A:Title: Molecular cloning of a human prion protein cDNA.

A:Reference number: A24173; MUID:86300093; PMID:3755672

A:Accession: A24173

A:Molecule type: mRNA

A:Residues: 1-253 <KRB>

A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468

R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A:Title: Genomic structure of the human prion protein gene.

A:Reference number: A40372; MUID:91328137; PMID:1678248

A:Accession: A40372

A>Status: not compared with conceptual translation

A:Molecule type: DNA

A:Residues: 1-80, 89-253 <PUC>

A:Cross-references: GB:X63446; NID:g747846; PIDN:CAA58442.1; PID:g747847

A>Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

R:Liio, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 364-367, 1986

A:Reference number: A05017; MUID:86261778; PMID:3014653

A:Accession: A05017

A:Molecule type: mRNA

A:Residues: 8-117, 119-253 <LIA>

A:Cross-references: GB:D00015; NID:g220015; PIDN:BAA0011.1; PID:g220016; GB:M13667; NID:

R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serhan, D.; Prusiner, S.B.; Farlow,

EMBO J. 10, 513-519, 1991

A:Title: Amyloid protein of Gerstmann-Sträussler-Scheinker disease (Indiana kindred) is

A:Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 56-72,'X','74'-76,'XX','79','XXX','83-86;111-126,'V','130-150 <TAG>
R:Diedrich, J.F., Knopman, D.S., Lisc, J.F., Olson, K., Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 9-83,'92'-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Shermata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: I58135; MUID:92140671; PMID:1736177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGGMGQPHGGMGQPFGGGMGQPHGGMGQPHGGMGQPHGGMG' <RES>
A:Cross-references: GB:S80539; NID:g244638; PIDN:AAB21334.1; PID:g244639
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldberg, D.; Swergold, G.D.; Willis, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, and
A:Reference number: I59184; MUID:92073400; PMID:1663708
A:Accession: I59184
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 60-67 <COL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:
C:GeneticS:
A:Gene: GDB:PMP, CJD, PRP
A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F.1-22/Domains: signal sequence #status predicted <SIG>
F.23-23/Product: major prion protein #status predicted <MAT>
F.54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F.231-253/Domains: carboxyl-terminal propeptide #status predicted <CTR>
F.179-214/Duplicate bonds: #status predicted
F.179-214/Duplicate bonds: #status predicted
F.179-214/Duplicate bonds: #status predicted
F.230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match	Best Local Similarity	Score 211:	DB 1:	Length 253:
Matches 40;	Conservative 100.0%;	Pred. No. 9.7e-20;	Mismatches 0;	Indels 0;
Gaps 0;				

Db 173 NNFFHDCVNITIKOHTVTTTTNGENFTETDVKMERVVEQ 40
173 NNFFHDCVNITIKOHTVTTTTNGENFTETDVKMERVVEQ 212

RESULT 7
184423
major prion protein precursor - rhesus macaque
CISpecies: Macaca mulatta (rhesus macaque)
CDate: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004
CAccession: I84423; S53622; S71054
R:Cervankova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental t
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I84423
A>Status: preliminary; translated from GB/EMBL/DDBJ

```

A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AA68635.1; PID:G59585
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210, 'R', 212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71054
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AA65095.1; PID:G474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 40
      |||
Db      173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C:Species: Macaca nemestrina (pig-tailed macaque)
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71055; S53626
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71055
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AA65094.1; PID:G474373
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53626
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 8-210, 'R', 212-247 <SCW>
A:Cross-references: EMBL:U08306
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 40
      |||
Db      173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 9
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C:Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
A:Accession: S53635
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

```

A>Title: Pion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:g474374; PIDN:AA05096.1; PID:g4743
A/Note: The source was designated as Symphalangus syndactylus
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10
137032
major pion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: J37032
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: J36907; MUID:95083661; PMID:7991600
A/Accession: J37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:g563208; PIDN:AAA6863.1; PID:g5632
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11
161847
major pion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: J61847; S71060; S53615
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: J36907; MUID:95083661; PMID:7991600
A/Accession: J61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:g609303; PIDN:AAA68632.1; PID:g6093
R/Schatz, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08296; NID:g474350; PIDN:AA05085.1; PID:g474351
R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Pion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210; 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major pion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; pion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 12
B34759
pion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:g191182; PIDN:AAA37014.1; PID:g191183
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 13
A34759
pion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:O60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 14
A23544
major pion protein precursor - mouse
N/Alternate names: Prp; Scrapie pion
C/Species: Mus musculus (house mouse)

C;Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C;Accession: A29669; A23544; S02521; A22315

R;Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A;Title: Distinct prion proteins in short and long scrapie incubation period mice.

A;Reference number: A29669; PMID:88052869; PMID:2890436

A;Accession: A29669

A;Molecule type: DNA

A;Residues: 1-254 <MES>

A;Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200528

A;Experimental source: strains NZW and I/LmJ

A;Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain differs

R;Locht, C.; Chesebro, B.; Race, R.; Keith, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A;Reference number: A23544; PMID:86313583; PMID:3462700

A;Accession: A23544

A;Molecule type: mRNA

A;Residues: 1-254 <LOC>

R;Hope, V.; Mulhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Bur. J. Biochem. 172, 271-277, 1988

A;Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A;Reference number: S02521; PMID:8816695; PMID:2894984

A;Accession: S02521

A;Molecule type: protein

A;Residues: 1-254 <HOP>

R;Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A;Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and

A;Reference number: A22315; PMID:85213844; PMID:3923361

A;Accession: A22315

A;Molecule type: mRNA

A;Residues: 87-132, 'V', 134-164 <CHB>

C;Superfamily: major prion protein

C;Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl

F;1-22/Domain: signal sequence #status predicted <SIG>

F;23-231/Product: major prion protein #status predicted <MAT>

F;232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F;178-213/Dissulfide bonds: #status predicted

F;180,196/Binding site: carboxylate (Asn) (covalent) #status predicted

F;231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTIKOHTVTTTGGNFETEDVKMERVVEQ 40

DB 172 NNFVHDCVNTIKOHTVTTTGGNFETEDVKMERVVEQ 211

DB 172 NNFVHDCVNTIKOHTVTTTGGNFETEDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:41

Job time: 13 secs

major prion protein precursor - common squirrel monkey

C;Species: Saimiri sciureus (common squirrel monkey)

C;Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C;Accession: 161848

R;Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A;Title: Infectious amyloid precursor gene sequences in primates used for experimental

A;Reference number: 136907; PMID:95083661; PMID:7991600

A;Accession: 161848

A;Status: preliminary; translated from GB/EMBL/DBJ

A;Molecule type: DNA

A;Residues: 1-252 <RES>

A;Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G55958

C;Superfamily: major prion protein

Query Match 99.5%; Score 210; DB 2; Length 252;

Best Local Similarity 97.5%; Pred. No. 1.3e-19;

Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNTIKOHTVTTTGGNFETEDVKMERVVEQ 40

DB 172 NNFVHDCVNTIKOHTVTTTGGNFETEDVKMERVVEQ 211

THE "WHEELS BLANK" (USPTO)

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTTTKGENTFDVKMERVBO 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues
Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt 02:.*
1: uniprot_sprot:.*
2: uniprot_trembl:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	232	1	PRIO_ATEGE
2	211	100.0	238	1	PRIO_CERAT
3	211	100.0	238	1	PRIO_THRGE
4	211	100.0	238	2	Q6XK1
5	211	100.0	240	2	Q6VHV4
6	211	100.0	241	1	PRIO_CALMO
7	211	100.0	241	1	PRIO_MANSF
8	211	100.0	245	1	PRIO_CERAE
9	211	100.0	246	1	PRIO_CERMO
10	211	100.0	246	1	PRIO_CERNE
11	211	100.0	246	1	PRIO_CERNA
12	211	100.0	246	1	PRIO_ERVPA
13	211	100.0	246	2	AA083636
14	211	100.0	248	2	Q6VHV5
15	211	100.0	252	1	PRIO_CALJA
16	211	100.0	252	1	PRIO_CERAP
17	211	100.0	253	1	PRIO_COLGU
18	211	100.0	253	1	PRIO_GORGO
19	211	100.0	253	1	PRIO_HUMAN
20	211	100.0	253	1	PRIO_HYLLA
21	211	100.0	253	1	PRIO_HYLSY
22	211	100.0	253	1	PRIO_MACRA
23	211	100.0	253	1	PRIO_PANTR
24	211	100.0	253	1	PRIO_PONRY
25	211	100.0	253	1	PRIO_PREFR
26	211	100.0	253	2	Q6FGH8
27	211	100.0	253	2	Q6JL99
28	211	100.0	253	2	Q9Z0T5
29	211	100.0	253	2	AA580162
30	211	100.0	253	2	AA12192
31	211	100.0	254	1	PRIO_CRIGR

32	211	100.0	254	1	PRIO_CRIMI	Q60468 cricetus
33	211	100.0	254	1	PRIO_MOUSE	P04925 mus musculus
34	211	100.0	254	1	PRIO_RAT	P13652 rattus norv
35	211	100.0	254	1	PRIO_SIGHI	Q920C3 sigmodon hi
36	211	100.0	254	2	Q920T4	Q920C4 sigmodon fu
37	211	100.0	254	2	Q6VHV6	Q6VHV6 apodemus sy
38	211	100.0	254	2	AA01993	Q6VHV6 apodemus sy
39	211	100.0	277	2	Q6SESI1	Q6SESI1 homo sapien
40	211	100.0	277	2	AA021603	AA021603 homo sapi
41	211	100.0	285	2	Q75942	Q75942 homo sapien
42	210	99.5	220	2	Q866W7	Q866W7 ochotona pr
43	210	99.5	248	2	Q866V6	Q866V6 diceros bic
44	210	99.5	260	1	PRIO_SAIISC	P40258 salmtr scl
45	209	99.1	215	2	Q811W3	Q811W3 spalax leuc

ALIGNMENTS

RESULT 1
PRIO_ATEGE STANDARD; PRT; 232 AA.
ID PRIO_ATEGE
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRP;
OS Ateles Geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxId=9509;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL Outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
CC EMBL: U08309; AAC50097.1; --
CC PIR: S71041; S71041.
CC HSBP; P23907; I604.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00705; PRION_2; 1.
CC PROSITE: PS00705; PRION_1; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER 1
CC SIGNAL <1 15 By similarity.
CC CHAIN 16 214 Major prion protein.
CC PROPEP 215 >232 Removed in mature form (By similarity).
CC LIPID 214 214 GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity).
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc... ) (potential).
FT DOMAIN 44 84 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
Db 157 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvana (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecidae;
OX NCBI_TaxID=36222, 9546;
[1] _SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U75384; AAB50623.1; -
CC EMBL: U75382; AAB50629.1; -
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; Prion; 1.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

```

```

FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc... ) (potential).
FT CARBOHYD 182 182 N-linked (GlcNAc... ) (potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A2BEC3E3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PR;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecidae;
OX NCBI_TaxID=9565;
[1] _SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U75383; AAB50630.1; -
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; Prion; 1.
CC PROSITE: PS00291; PRION_1; 1.

```

DR PROSITE: PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 215
 FT PROPEP 216 >238
 FT DISULFID 164 199
 FT LIPID 215 215
 FT CARBOHYD 166 166
 FT CARBOHYD 182 182
 FT DOMAIN 44 83
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 75
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26104 MW; 5F59BF602243EDB CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 238;
 Best Local Similarity 100.0%; Pred. No. 3.6e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
 Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
 Q86XR1 PRELIMINARY; PRT; 238 AA.
 AC Q86XR1;
 DT 01-JUN-2003 (T-EMBLrel. 24, Created)
 DT 01-JUN-2003 (T-EMBLrel. 24, Last sequence update)
 DT 01-MAR-2004 (T-EMBLrel. 26, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PRNP;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AY219882; AA083635.1; -.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 238;
 Best Local Similarity 100.0%; Pred. No. 3.6e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
 Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
 Q8VHVA PRELIMINARY; PRT; 240 AA.
 AC Q8VHVA;
 Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

DT 01-MAR-2002 (T-EMBLrel. 20, Created)
 DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (T-EMBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PRP;
 OS Microtus agrestis (Short-tailed field vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Microtus.
 OC NCBI_TaxID=29092;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367625; AL57232.1; -.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 240 240
 SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 240;
 Best Local Similarity 100.0%; Pred. No. 3.7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
 Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
 P10_CALMO STANDARD; PRT; 241 AA.
 ID P10_CALMO
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Callipebus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
 OC Callitrichus.
 OC NCBI_TaxID=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 DR EMBL; U08312; AAC50100.1; -
 DR PIR; S71048; S71048.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; Prion.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT FT NON_TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT DISULFID 172 207 By similarity.
 FT LIPID 223 223 GPI-anchor amidated serine (By similarity).
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 FT SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3.7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 7
 PRIO_MANSP STANDARD; PRT; 241 AA.
 ID PRIO_MANSP
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandillus sphinx (Mandill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandillinae.
 NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASES: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE),

transmissible mink encephalopathy (TME), etc.
 -1- SIMILARITY: Belongs to the prion family.

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 DR EMBL; U08303; AAC50091.1; -
 DR PIR; S71056; S71056.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT FT NON_TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By similarity).
 FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 FT SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3.7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 8
 PRIO_CERAE STANDARD; PRT; 245 AA.
 ID PRIO_CERAE
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OC Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=9534, 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called


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CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyrighted. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL; U08291; AAC50080.1; -.
DR      EMBL; U08292; AAC50081.1; -.
DR      PIR; S53627; S53627.
DR      PIR; S71045; S71045.
DR      HSSP; P23907; IG04.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF03991; Prion; octapep; 5.
DR      PRINTS; PR00341; PRION.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
DR      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 22
FT      CHAIN 1 222
FT      PROPEP 223 242
FT      LIPID 222 242
FT      DISULFID 171 206
FT      CARBOHYD 173 173
FT      CARBOHYD 189 189
FT      DOMAIN 51 83
FT      REPEAT 51 59
FT      REPEAT 60 67
FT      REPEAT 68 75
FT      REPEAT 76 83
SQ      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
Query Match 100.0%; Score 211; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNIITIKQHTVTTTGGNTETDVKMERVVEQ 40
DB      165 NNFVHDCVNIITIKQHTVTTTGGNTETDVKMERVVEQ 204

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyrighted. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL; U75386; AAB50625.1; -.
DR      HSSP; P23907; IG04.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF03991; Prion; octapep; 6.
DR      PRINTS; PR00341; PRION.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
DR      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 15
FT      CHAIN 1 223
FT      PROPEP 224 246
FT      LIPID 223 223
FT      DISULFID 172 207
FT      CARBOHYD 174 174
FT      CARBOHYD 190 190
FT      DOMAIN 44 84
FT      REPEAT 44 52
FT      REPEAT 53 60
FT      REPEAT 61 68
FT      REPEAT 69 76
FT      REPEAT 77 84
SQ      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNIITIKQHTVTTTGGNTETDVKMERVVEQ 40
DB      166 NNFVHDCVNIITIKQHTVTTTGGNTETDVKMERVVEQ 205

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RESULT 9
ID      PRIO_CERMO STANDARD; PRT; 246 AA.
AC      P61761; Q95172; Q95173;
DT      01-NOV-1997 (Rel. 35, Created)
DT      01-NOV-1997 (Rel. 35, Last sequence update)
DE      05-JUL-2004 (Rel. 44, Last annotation update)
DE      Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN      Name=PRNP;
OS      Cercopithecus mona (Mona monkey).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eumleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC      Cercopithecinae; Cercopithecus.
OX      NCBI_TaxID=36226;
RN      [1]
RP      van der Kuyl A.C.; Dekker J.T.; Goudsmit J.;
RT      "Evidence for an increased substitution rate of the hominoid prion
RT      protein gene during the period of brain expansion."

```

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RESULT 10
ID      PRIO_CERNE STANDARD; PRT; 246 AA.
AC      P61762; Q95172; Q95173;
DT      01-NOV-1997 (Rel. 35, Created)
DT      01-NOV-1997 (Rel. 35, Last sequence update)
DE      05-JUL-2004 (Rel. 44, Last annotation update)
DE      Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN      Name=PRNP;
OS      Cercopithecus neglectus (Debranza's monkey).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eumleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC      Cercopithecinae; Cercopithecus.
OX      NCBI_TaxID=36227;
RN      [1]
RP      SEQUENCE FROM N.A.

```

```

RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75387; AAB50626.1; -.
CC HSRP; P23907; I004.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER
CC SIGNAL
CC CHAIN
CC PROPEP
CC LIPID
CC DISULFID
CC CARBOHYD
CC CARBOHYD
CC DOMAIN
CC REPEAT
CC REPEAT
CC REPEAT
CC REPEAT
CC REPEAT
CC SEQUENCE
SQ

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Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. NO. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 205

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RESULT 11
PRIO_CERTO ID PRIO_CERTO STANDARD; PRT; 246 AA.
AC Q95176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.

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OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75385; AAB50628.1; -.
CC HSRP; P23907; I004.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER
CC SIGNAL
CC CHAIN
CC PROPEP
CC LIPID
CC DISULFID
CC CARBOHYD
CC CARBOHYD
CC DOMAIN
CC REPEAT
CC REPEAT
CC REPEAT
CC REPEAT
CC REPEAT
CC SEQUENCE
SQ

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Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. NO. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 40
DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKMERVVEQ 205

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RESULT 12
PRIO_ERYPA ID PRIO_ERYPA STANDARD; PRT; 246 AA.
AC Q95174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Erythrocebus.
 OC NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudenit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "folds".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
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 CC entities requires a license agreement (See <http://www.ebi.ac.uk/announcements>
 CC or send an email to license@ebi.ac.uk).
 CC -----
 CC
 DR EMBL; U75388; AAB50627.1; -;
 DR HSSP; P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26886 MW; D35D105B8EC53108 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVEEQ 205
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 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TREMBlrel. 27, Created)
 DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
 DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 OC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -;
 KM Prion.
 FT NON_TER 1
 FT NON_TER 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVEEQ 40
 Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVEEQ 205
 RESULT 14
 ID 08VHV5 PRELIMINARY; PRT; 248 AA.
 AC 08VHV5;
 DT 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 OC NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367624; AAL57231.1; -;
 DR InterPro: IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
 FT NON_TER 248
 FT NON_TER 248
 SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVEEQ 40
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVEEQ 212
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DR 05-JUL-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Pp33-35C).
GN Name=PRNP;
OS Callitrichus jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrich.
OX NCBI_Taxid=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation-
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U08304; AAC50092.1; -.
DR PIR: S53634; S53634.
DR HSPSP; P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT FT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
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FT REPEAT 90 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60F5CE664 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVYEQ 40
DB 172 NNFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVYEQ 211

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
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3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/1aa/PTUS.COMB.pep.*
6: /cgn2_6/ptodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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1	211	100.0	142 1 US-08-556-823-10	Sequence 10, Appl
2	211	100.0	245 4 US-09-431-887-5	Sequence 5, Appl
3	211	100.0	245 4 US-09-431-887-15	Sequence 15, Appl
4	211	100.0	252 4 US-09-431-887-13	Sequence 13, Appl
5	211	100.0	252 4 US-09-431-887-17	Sequence 17, Appl
6	211	100.0	253 1 US-08-242-188-2	Sequence 2, Appl
7	211	100.0	253 1 US-08-509-261A-2	Sequence 2, Appl
8	211	100.0	253 1 US-08-660-626-8	Sequence 8, Appl
9	211	100.0	253 1 US-08-692-892-2	Sequence 2, Appl
10	211	100.0	253 2 US-08-713-939A-2	Sequence 2, Appl
11	211	100.0	253 2 US-08-868-162A-22	Sequence 22, Appl
12	211	100.0	253 3 US-09-031-168-8	Sequence 20, Appl
13	211	100.0	253 3 US-09-128-450-20	Sequence 2, Appl
14	211	100.0	253 3 US-09-036-579-2	Sequence 2, Appl
15	211	100.0	253 3 US-09-823-49A-20	Sequence 20, Appl
16	211	100.0	253 3 US-09-550-374-2	Sequence 2, Appl
17	211	100.0	253 4 US-09-431-887-1	Sequence 1, Appl
18	211	100.0	253 4 US-09-431-887-2	Sequence 2, Appl
19	211	100.0	253 4 US-09-431-887-3	Sequence 3, Appl
20	211	100.0	253 4 US-09-431-887-4	Sequence 4, Appl
21	211	100.0	253 4 US-09-431-887-7	Sequence 7, Appl
22	211	100.0	253 4 US-09-431-887-8	Sequence 8, Appl
23	211	100.0	253 4 US-09-431-887-9	Sequence 9, Appl
24	211	100.0	253 4 US-09-431-887-10	Sequence 10, Appl
25	211	100.0	253 4 US-09-431-887-11	Sequence 11, Appl
26	211	100.0	253 4 US-09-431-887-12	Sequence 12, Appl
27	211	100.0	253 4 US-09-431-887-14	Sequence 14, Appl

28	211	100.0	253 4 US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253 4 US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253 4 US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253 4 US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253 4 US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253 4 US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253 4 US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253 4 US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254 1 US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254 1 US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254 1 US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254 1 US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254 2 US-08-713-939A-1	Sequence 1, Appl
41	211	100.0	254 2 US-08-868-162A-21	Sequence 21, Appl
42	211	100.0	254 3 US-09-031-168-7	Sequence 7, Appl
43	211	100.0	254 3 US-09-128-450-19	Sequence 19, Appl
44	211	100.0	254 3 US-09-128-450-28	Sequence 28, Appl
45	211	100.0	254 3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556, 823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; length 142;
Best Local Similarity 100.0%; Pred. No. 3.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVEQ 123

RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 40
Db 165 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 204

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 40
Db 165 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 204

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 40
Db 172 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 211

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 40
Db 172 NNFWHDCVNITIKOHTVTTTNGENFTETDVKMMERVVEQ 211

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prustner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Boslcevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
TOPOLOGY: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 212

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: in a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 212

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5769655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETVDVKMERVVEQ 212

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: AsciiII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 621149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRP
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Butson, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETETDVKKMERVVEQ 212

RESULT 15
US-09-823-494-20

Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETETDVKKMERVVEQ 212

Search completed: December 3, 2004, 00:18:58
Job time: 15.1475 secs

GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTNGENFTEDVKMERVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebhel, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;

APPLICANT: Tisect, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellisoli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luhrs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 211; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 40
Db 83 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 122

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PEP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 211; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 40
Db 82 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 121

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 211; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9,5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 40

Db 143 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 182

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 211; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 190

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Paatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 211; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMERVVEQ 190

RESULT 14

```
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470, 848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
      |||
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 150

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470, 848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
      |||
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

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Job time : 47.3443 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
Sequence: 1 VYRRPYDQYSNQNFVHDCV.....HVTYTKGNFTEDIKKM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: geneseqp1960s:.*
2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	250	100.0	117	5	ABG94358 Modified
2	250	100.0	117	5	ABG80670 Bovine pr
3	250	100.0	117	7	ADD24197 Modified
4	250	100.0	217	3	AAB07317 Cattle pr
5	250	100.0	217	3	AAB07328 Cattle pr
6	250	100.0	219	2	AAW70261 Bovine pr
7	250	100.0	219	2	AAW93571 Bovine pr
8	250	100.0	256	6	ABP57900 Bovine BS
9	250	100.0	263	2	AAW69661 Bovine pr
10	250	100.0	263	2	AAW85902 Bovine pr
11	250	100.0	263	4	AAW65854 Bovine pr
12	250	100.0	263	4	ABP51788 Bovine pr
13	250	100.0	263	6	ABU58869 Bovine pr
14	250	100.0	263	6	AAE33228 Bovine pr
15	250	100.0	263	8	ADK15534 Bovine pr
16	250	100.0	264	2	AAW07995 Bovine pr
17	250	100.0	264	4	AAW61769 Bovine pr
18	250	100.0	264	4	AAW82113 Bovine pr
19	250	100.0	264	5	ABW04424 Bovine pr
20	250	100.0	264	5	AAE15604 Bovine pr
21	250	100.0	264	6	ABU07876 Bovine pr
22	250	100.0	264	6	AAE36754 Cow prion
23	250	100.0	264	6	ABP55139 Bovine pr
24	250	100.0	264	6	ABR42798 Bovine pr
25	250	100.0	264	6	ABR42798 Bovine pr

26	250	100.0	264	6	ABR42801 Cattle pr
27	250	100.0	264	7	ADD24187 Bovine pr
28	250	100.0	264	7	ADW86886 Bovine w1
29	250	100.0	264	7	ADW06743 Bovine pr
30	250	100.0	264	8	ADH44555 Bovine pr
31	250	100.0	264	8	ADK15535 Bovine pr
32	250	100.0	264	8	ADK15535 Bovine pr
33	250	100.0	264	8	ADL15208 Bovine pr
34	250	100.0	265	5	AAW50889 Bovine pr
35	249	99.6	264	4	AAW72364 Cow prion
36	247	98.8	264	4	AAW72364 Kudu prion
37	246	98.4	264	7	ADW86899 Bovine mu
38	245	98.0	124	5	ABG94340 Mouse mPr
39	245	98.0	124	5	ABG94340 Mouse mPr
40	245	98.0	124	5	ABG94340 Mouse mPr
41	245	98.0	208	3	AAW07327 Mouse pr1
42	245	98.0	208	7	ADJ66133 Mouse pr1
43	245	98.0	211	4	AAW30801 Amino ac1
44	245	98.0	225	6	ABR42793 Rat prion
45	245	98.0	226	7	ABW85240 Rat prion

ALIGNMENTS

RESULT 1
ABG94358
ID ABG94358 standard; protein, 117 AA.

XX ABG94358;
AC
XX
XX
DT 06-AUG-2003 (revised)
DT 10-DEC-2002 (first entry)

XX Modified bovine prion protein fragment.

XX Human, mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW Cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.

XX Bos taurus.
OS
PN W0200256905-A2.

XX 21-JAN-2002; 2002WO-1B000166.

XX 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PI Renner WA, Bachmann M, Tisbet A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.
PS Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organiser comprising
XX at least one first attachment site, where the organiser is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment

site, where the antigen or antigenic determinant is any/oid beta peptide (Abeta1-43) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant Obeta coat proteins having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a protein sequence used to create the compositions of the invention. (Updated on 06-Aug-2003 to correct OS field.)

SQ Sequence 117 AA;

Query Match	100.0%;	Score 250;	DB 5;	Length 117;
Best Local Similarity	100.0%;	Pred. No. 8e-24;		
Matches	46;	Conservative	0;	Mismatches 0;
			Indels	0;
			Gaps	0

Qy 1 VYRRPVDQYSNQNNFVHDCVNITVKEHTVTTTTNGENFTETDICKM 46
 |||||
Db 40 VYYRPVDQYSNQNNFVHDCVNITVKEHTVTTTTNGENFTETDICKM 85

RESULT 2
ABG80670
ID ABG80670 standard; protein; 117 AA

DT 29-NOV-2002 (first entry)

DE Bovine prion protein/cysteine-containing peptide fusion protein.

KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mitefin;
KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
KM adult respiratory distress syndrome; ARDS; Crohn's disease;
KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KM Graves's disease; systemic lupus erythematosus; osteoporosis;
KM inflammatory immune disease; mastitis; multiple sclerosis;
KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
KM angiolymphoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
KM enterokinase; cysteine-containing linker.

OS Bos taurus
OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002

PF 21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.

PR 05-OCT-2001; 2001US-0326998P.
OT NOV 2001 000104ED

XX
XX
(CYTO-) CYTOS PROTECTANTOR IN

PA (NOVS) NOVARTIS PHARMA AG.
PA (MATH/) MATHER D

PA (LECH/) LECHNER F.
PA (OPTM/) OPTMANN P.

PA (LUEO/) LUEOEND R.
PA (STAI/) STAIENBET. M

PA (FREY/) FREY P.

XX Maurer P, Lechner F, Ottmann R, Luesoend R, Staufendel M, Frey P
PI Renner W, Bachmann M, Tissot A, Seibel P, Plosser C;
XX
DR WPI; 2002-636514/68.

DR WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious PT diseases.

PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
CC molecular scaffold comprising: (1) a core particle selected from: (1) a
CC core particle of a non-natural origin; and (2) a core particle of natural
CC origin; and (ii) an organiser comprising at least one first attachment
CC site, where the organiser is connected to the core particle by at least
CC one covalent bond; (b) an antigen or antigenic determinant with at least
CC one second attachment site, where the antigen or antigenic determinant is
CC amyloid beta peptide (A β 1-42) or its fragment; and where the second
CC attachment site is selected from: (i) an attachment site not naturally
CC occurring with the antigen or antigenic determinant; and (ii) an
CC attachment site naturally occurring with the antigen or antigenic
CC determinant; where the second attachment site is capable of association
CC through at least one non-peptide bond to the first attachment site; and
CC where the antigen or antigenic determinant and the scaffold interact
CC through the association to form an ordered and repetitive antigen array.
CC Also included is a process for producing a non-naturally occurring

ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IgE-mediated allergic reactions, amyotrophic adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a modified antigen for use in the array of the invention. The antigen is modified to possess a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N- or C-terminal linker peptide which serves as the attachment point to a virus like particle or bacterial protein (the scaffold protein).

SQ Sequence 117 AA;

Query Match	100.0%	Score 250;	DB 5;	Length 117;
Best Local Similarity	100.0%	Pred. No. 8e-24;		
Matches 46;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

Oy 1 VYRRPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFTETIDIKM 46
 |||||
 40 VYRRPVDQSNQNNEFVHDCVNITVKEHTVTTTNGENFTETIDIKM 85
Db

RESULT 3

ID ADD24197 standard; protein; 117 AA.

AC ADD24197;

DT 15-JAN-2004 (first entry)

DE Modified bovine prion protein amino acid sequence.

KW vaccine composition; virus-like particle; core particle; first attachment site; antigenic determinant; fusion proteins

KW PRP; PRP peptide; vaccine; neuroprotective; antiinflammatory;

KW Creutzfeldt-Jakob Disease; prion.
 YV

Synthetic.

XX

PN MO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003MO-EP000460.
 PF
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS Disclosure; SEQ ID NO 90; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC bovine prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 CC
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 250; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 VVYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGENFTETDIKMM 46
 Db 40 VVYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGENFTETDIKMM 85
 XX
 RESULT 4
 AAB07317
 ID AAB07317 standard; protein; 217 AA.
 XX
 AC AAB07317;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KW Cattle; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FT 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT 166..201
 FT Disulfide-bond 217
 FT Modified-site
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX

PN MO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 XX 27-OCT-1999; 99MO-FI000897.
 PF
 PR 17-NOV-1998; 98FI-00002481.
 PR
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 DR WPI; 2000-387880/33.
 XX
 PT Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 XX The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates BSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 CC
 XX Sequence 217 AA;
 SQ
 Query Match 100.0%; Score 250; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 VVYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGENFTETDIKMM 46
 Db 148 VVYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGENFTETDIKMM 193
 XX
 RESULT 5
 AAB07328
 ID AAB07328 standard; protein; 217 AA.
 XX
 AC AAB07328;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KW Cattle; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FT 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT 166..201
 FT Disulfide-bond 217
 FT Modified-site
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PD 25-MAY-2000.
 XX

PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI, 2000-399778/34.
 XX
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAH07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;
 XX
 Query Match 100.0%; Score 250; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 VYRPVQDYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDIDIKM 46
 DB 149 VYRPVQDYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDIDIKM 193
 XX
 RESULT 6
 AAW70261
 ID AAW70261 standard; protein; 219 AA.
 XX
 AC AAW70261;
 XX
 DT 13-NOV-1998 (first entry)
 XX
 DE Bovine prion protein.
 XX
 KW Prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;
 KW prion disease detection; bovine spongiform encephalopathy; therapy;
 KW Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KW Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 OS
 PN EP661900-A1.
 XX
 PD 02-SEP-1998.
 XX
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ERZI-) ERZIEHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korth C, Stierli B, Moser M, Streiff P, Oesch B;
 XX
 DR WPI, 1998-449112/39.
 DR N-PEDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine, spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 XX
 XX Disclosure; Page 20-21; 35pp; English.
 CC
 CC This sequence represents the bovine prion protein (PrP). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrPc) and disease-specific prion protein (PrPsc) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific PrP in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;
 XX
 Query Match 100.0%; Score 250; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 VYRPVQDYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDIDIKM 46
 DB 149 VYRPVQDYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDIDIKM 194
 XX
 RESULT 7
 AAW93571
 ID AAW93571 standard; protein; 219 AA.
 XX
 AC AAW93571;
 XX
 DT 17-JUN-1999 (first entry)
 XX
 DE Bovine rPrP protein.
 XX
 KW Prion protein; PrP; rPrP; disease specific isoform; PrP(Sc); vaccine;
 KW treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KW detection.
 XX
 OS Bos taurus.
 OS
 PN DE19741607-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 XX
 PI Moser M, Oesch B, Korth C;
 XX
 DR WPI, 1999-205964/18.
 XX
 PT New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. Scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" PrP (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
 CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
 CC for diagnosis of scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The
 CC polypeptides are also useful in pharmaceutical or chemical libraries for
 CC detection of PrP(Sc)-specific agents

XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 250; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 46
 |||||
 DB 149 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 194

RESULT 8
 ABP57900
 ID ABP57900 standard; protein; 256 AA.
 XX
 AC ABP57900;

DT 12-FEB-2003 (first entry)

DE Bovine BSE-resistant prion protein.

XX Transmissible spongiform encephalopathy; neuroprotective; prion protein;
 KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;
 KM TSE.

XX Bos taurus.

XX WO200279416-A2.

PD 10-OCT-2002.

PF 28-MAR-2002; 2002WO-US009652.

PR 30-MAR-2001; 2001US-0280549P.

XX (TEXA) UNIV TEXAS A & M SYSTEM.

XX Dunne PW, Piedrahita J;

XX WPI; 2003-0932895/08.

DR N-PSDB; ABV99701.

XX New transgenic bovine and cervid useful for producing animals which are
 PT resistant to bovine spongiform encephalopathy and transmissible
 PT spongiform encephalopathy disease, comprise a transgene encoding a mutant
 PT PrP polypeptide.

XX Claim 1; Fig 6; 98pp; English.

XX The invention relates to a novel transgenic bovine/cervid comprising a
 CC transgene encoding a mutant prion protein (PrP) polypeptide, in which a
 CC substitution has been made at position 171 of the sequence, which renders
 CC the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and
 CC transmissible spongiform encephalopathy (TSE) disease, respectively. The
 CC transgene of the invention has neuroprotective activity. The method is
 CC useful for producing a transgenic bovine or cervid resistant to BSE and
 CC TSE diseases. The bovine prion gene is useful for producing transgenic
 CC cattle exhibiting resistance to bovine spongiform encephalopathy. The
 CC sequence represents the mutant bovine PrP polypeptide

XX Sequence 256 AA;

Query Match 100.0%; Score 250; DB 6; Length 256;
 Best Local Similarity 100.0%; Pred. No. 2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 46

DB 164 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 209
 |||||

RESULT 9
 AAR86716
 ID AAR86716 standard; protein; 263 AA.
 XX
 AC AAR86716;

DT 15-OCT-1996 (first entry)

DE Bovine prion protein, BoPrP.

XX Chimeric gene; chimeric prion; transgenic animal; diagnosis;
 KM spongiform encephalopathy; PrP; central nervous system; CNS;
 KM Creutzfeldt-Jacob disease; CJD; BSE.

XX Bos taurus.

XX WO9531466-A1.

PD 23-NOV-1995.

PF 10-APR-1995; 95WO-US004426.

PR 13-MAY-1994; 94US-00242188.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Scott MR, Telling G;

XX WPI; 1996-010868/01.

XX Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.

XX Disclosure; Page 42-43; 65pp; English.

XX Pathogenic prions in a sample can be detected by injecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. cattle) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding bovine PrP
 CC sequence

XX Sequence 263 AA;

Query Match 100.0%; Score 250; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 2.1e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 46
 |||||
 DB 171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKM 216

RESULT 10
 AAW69661
 ID AAW69661 standard; protein; 263 AA.
 XX
 AC AAW69661;

XX 25-MAR-2003 (revised)

DT 13-OCT-1998 (first entry)

DE Bovine prion protein BoPrP.

XX Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

```

OS Bos sp.
XX
XX US5792901-A.
XX
XX 11-AUG-1998.
XX
XX 30-JUL-1996; 96US-00692892.
XX
XX 13-MAY-1994; 94US-00242188.
XX 31-JUL-1995; 95US-00509261.
XX 31-AUG-1995; 95US-00521992.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Scott MR, Telling GC, Prusiner SB;
XX
XX WPI, 1998-456207/39.
XX
XX Transgenic mouse with altered PrP gene - for detecting disease-causing
XX prions.
XX
XX Example 8; Fig 4; 37pp; English.
XX
XX A transgenic mouse has been developed which comprises a genome in which
XX both alleles of an endogenous PrP (prion protein) gene of the mouse are
XX ablated, the genome containing operatively inserted all exogenous non-
XX mouse PrP gene. The mouse is susceptible to infection with prions which
XX generally only infect a genetically diverse mammal due to the presence of
XX the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
XX symptoms of prion disease within 200 days or less after inoculation with
XX prions which generally only infect a genetically diverse mammal. Also
XX described in the present invention are: (A) a method of producing the
XX transgenic mouse; and (B) determining the presence of infectious prions
XX in a sample obtained from a bovine. The transgenic mouse is used to
XX detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
XX disease of humans caused by prions. The present sequence represents
XX bovine prion protein (BovPrP), from the present invention. (Updated on 25-
XX MAR-2003 to correct PF field.)
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 250; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 2.1e-23;
XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGENTFDIKM 46
XX 171 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGENTFDIKM 216
XX
XX RESULT 11
XX ID AAW85902 standard; peptide; 263 AA.
XX AC AAW85902;
XX
XX 12-FEB-1999 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
XX Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
XX cosmetic; therapeutic; bovine.
XX
XX Bos sp.
XX
XX US5846533-A.
XX
XX 08-DEC-1998.
XX
XX 13-SEP-1996; 96US-00713939.
XX
XX 14-SEP-1995; 95US-00528104.
XX

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XX
XX (REGC ) UNIV CALIFORNIA.
XX PA (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI, 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 43-44; 58pp; English.
XX
XX This represents a bovine prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesizing a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins, isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
XX and optionally analysing the phages to determine a nucleic acid sequence
XX encoding an amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 250; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 2.1e-23;
XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGENTFDIKM 46
XX 171 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGENTFDIKM 216
XX
XX RESULT 12
XX ID AAG65854 standard; protein; 263 AA.
XX AC AAG65854;
XX
XX 11-FEB-2002 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnia; PrP-Sc;
XX scrapie; Gerstmann-Strassler-Scheinker disease.
XX
XX Bos sp.
XX
XX US6290954-B1.
XX
XX 18-SEP-2001.
XX
XX 06-MAR-1998; 98US-00036579.
XX
XX 14-SEP-1995; 95US-00528104.
XX 13-SEP-1996; 96US-00713939.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI, 2001-637939/73.
XX
XX Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
XX particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
XX Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
XX Sc antibodies.
XX

```

PS Disclosure; Fig 3; 58pp; English.

XX The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Strassler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX

SQ Sequence 263 AA;

Query Match 100.0%; Score 250; DB 4; Length 263;

Best Local Similarity 100.0%; Pred. No. 2.1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYVRPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 46

DB 171 VYVRPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 216

RESULT 13

ABP51788

ID ABP51788 standard; protein; 263 AA.

XX

AC ABP51788;

XX

DT 03-OCT-2002 (first entry)

XX

DE Bovine prion protein (PrP) SEQ ID NO:3.

XX

KM Prion protein; PrP; scrapie; PrPSc; prion disease; immunosassay;

XX

OS Bos sp.

XX

PN US6372214-B1.

XX

PD 16-APR-2002.

XX

PF 13-APR-2000; 2000US-00550374.

XX

PR 14-SEP-1995; 95US-00528104.

XX

PR 13-SEP-1996; 96US-00713939.

XX

PR 06-MAR-1998; 98US-00036579.

XX

PA (REGC) UNIV CALIFORNIA.

XX

PA (SCRI) SCRIPPS RES INST.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

PI WPI; 2002-433675/46.

XX

DR

PT Immunosassays for detecting scrapie isoforms of prion protein (PrPSc) and

PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

PT and testing pharmaceuticals for contamination.

XX

PS Disclosure; Fig 3; 58pp; English.

XX

XX The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterised by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e.

CC immunosassays), for separating PrPSc proteins from biological samples

CC (i.e. immunopurification) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX

SQ Sequence 263 AA;

Query Match 100.0%; Score 250; DB 5; Length 263;

Best Local Similarity 100.0%; Pred. No. 2.1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYVRPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 46

DB 171 VYVRPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 216

RESULT 14

ABU58869

ID ABU58869 standard; protein; 263 AA.

XX

AC ABU58869;

XX

DT 15-APR-2003 (first entry)

XX

DE Bovine prion protein (PrP).

XX

KM Prion protein; native prion protein; PrPSc; phage display library;

XX

KW pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

XX

KW scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

XX

KW feline spongiform encephalopathy.

XX

OS Bos sp.

XX

PN US2002150571-A1.

XX

PD 17-OCT-2002.

XX

PF 30-AUG-2001; 2001US-00943906.

XX

PR 14-SEP-1995; 95US-00528104.

XX

PR 13-SEP-1996; 96US-00713939.

XX

PR 06-MAR-1998; 98US-00036579.

XX

PR 13-APR-2000; 2000US-00550374.

XX

PA (PRUS/) PRUSINER S B.

XX

PA (WILL/) WILLIAMSON R A.

XX

PA (BURT/) BURTON D R.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

PI WPI; 2003-198264/19.

XX

DR

PT Novel antibody that has the ability to specifically bind to native prion

PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

PT determining the cause of death of an animal, or in therapy.

XX

PS Disclosure; Fig 3; 36pp; English.

XX

XX The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesising a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

CC treating a material by adding to the material a sufficient amount of (1)
 CC to neutralise PrPsc protein infectivity; in an assay to screen for the
 CC presence of prions (1.e. PrPsc) in products such as pharmaceuticals, food
 CC or cosmetics, in prion neutralisation to purify a product, in extraction
 CC of prion proteins, and in therapy. (1) provides a fast, efficient and
 CC cost effective assay for detecting the presence of PrPsc in a sample, and
 CC binds to a relatively high percentage of the infectious form of PrPsc.
 CC This is the amino acid sequence of a prion protein used in the creation
 CC of an anti-prion protein-antibody

XX Sequence 263 AA;

Query Match 100.0%; Score 250; DB 6; Length 263;
 Best Local Similarity 100.0%; Pred. No. 2.1e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 46
 DB 171 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 216

RESULT 15

AAE33228 AAE33228 standard; protein; 263 AA.

XX AAE33228;

DT 02-MAY-2003 (first entry)

DE Bovine PrP protein.

XX Bovine; pathogenic; prion protein; PrPsc; Creutzfeldt-Jakob disease;

KM kuru; vaccine; neuroprotective; immunostimulant.

XX Bos sp.

XX WO200287502-A2.

XX 07-NOV-2002.

XX 25-APR-2002; 2002WO-US013346.

XX 01-MAY-2001; 2001US-0287971P.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Peretz D, Williamson RA, Burton DR;

XX WPI; 2003-140150/13.

XX Composition for clearing a disease conformation of a protein, especially
 PT PrPsc protein, and treating, e.g., Creutzfeldt-Jakob disease comprises
 PT molecule, e.g., antibodies which bind and prevent conversion to disease
 PT conformation.

PS Disclosure; Page 37-38; 38pp; English.

XX The invention relates to composition for clearing a disease conformation
 CC of a protein, especially pathogenic prion protein (PrPsc) from a cell.
 CC The composition comprises molecules which bind a number of epitopes on a
 CC first conformation of a protein, where the conversion to a second
 CC conformation is prevented to allow a cell to clear protein in the second
 CC conformation. The composition is useful for preventing or treating, e.g.,
 CC kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The
 CC present sequence is bovine PrP protein

XX Sequence 263 AA;

Query Match 100.0%; Score 250; DB 6; Length 263;
 Best Local Similarity 100.0%; Pred. No. 2.1e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 46

DB

171 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 216

Search completed: December 3, 2004, 00:55:42
 Job time : 77.1639 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_Copy_176_221
Perfect score: 250
Sequence: 1 VYRPVDOYSNONNFVHDCV.....HTVTTTGTGENTEDIKM 46

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	250	100.0	256 2 JU0268	major prion protei
2	250	100.0	264 2 A54330	major prion protei
3	247	98.8	264 2 S37137	prion protein - gr
4	245	98.0	226 2 A53892	prion-related prot
5	245	98.0	241 2 S71048	major prion protei
6	245	98.0	241 2 S71056	major prion protei
7	245	98.0	245 2 S53627	major prion protei
8	245	98.0	245 2 S71045	major prion protei
9	245	98.0	252 2 S53631	major prion protei
10	245	98.0	253 2 S53624	major prion protei
11	245	98.0	253 2 S53623	major prion protei
12	245	98.0	253 2 S53620	major prion protei
13	245	98.0	253 2 S53625	major prion protei
14	245	98.0	253 2 I84423	major prion protei
15	245	98.0	253 2 S71055	major prion protei
16	245	98.0	253 2 S53616	major prion protei
17	245	98.0	253 2 S53618	major prion protei
18	245	98.0	253 2 A23544	major prion protei
19	245	98.0	254 2 A23544	major prion protei
20	244	97.6	260 2 S53629	major prion protei
21	243	97.2	256 2 S37149	prion protein - go
22	243	97.2	256 2 A54281	major prion protei
23	242	96.8	232 2 S71041	major prion protei
24	242	96.8	252 2 S53634	major prion protei
25	242	96.8	253 2 S53634	major prion protei
26	242	96.8	253 2 I37032	major prion protei
27	242	96.8	254 2 I34759	prion protein - Ch
28	242	96.8	254 2 A34759	prion protein - Ch
29	241	96.4	239 2 S53633	major prion protei

30	241	96.4	252 2 I61848	major prion protei
31	239	95.6	253 1 U0H1	major prion protei
32	239	95.6	254 1 U0H1H	major prion protei
33	239	95.6	257 2 A23545	major prion PrP27-
34	238	95.2	252 2 UC6175	prion protein - ra
35	237	94.8	253 2 S53617	major prion protei
36	237	94.8	253 2 S53635	prion protein - B1
37	237	94.8	253 2 I61847	major prion protei
38	237	94.8	257 2 JU0268	major prion protei
39	237	94.8	257 2 U0H1	major prion protei
40	73	29.2	267 1 A37372	prion protein homo
41	73	29.2	273 2 A46280	prion protein - Ch
42	64	25.6	139 2 H90004	hypothetical prote
43	60	24.0	170 2 B84257	flagellin A2 precu
44	60	24.0	194 2 B28944	flagellin A2 precu
45	58.5	23.4	193 1 C28944	flagellin B1 precu

ALIGNMENTS

RESULT 1
JU0268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 31-Mar-1992 #sequence revision 31-Mar-1992 #text change 09-Jul-2004
C/Accession: JU0268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A/Accession: JU0268
A/Molecule type: DNA
A/Residues: 1-256 <YOS>
A/Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C:Keyfamily: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <Sig>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:60-91/Region: 8-residue repeats
F:182-217/Diulfide bonds: #status predicted
F:184,200/Binding site: carbohydrate (Aen) (covalent) #status predicted

Query Match 100.0%; Score 250; DB 2; Length 256;
Best Local Similarity 100.0%; Pred. No. 2, 4e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTVKEHTVTTTGTGENTEDIKM 46
DB 164 VYRPVDOYSNONNFVHDCVNTVKEHTVTTTGTGENTEDIKM 209

RESULT 2
A54330
major prion protein 1 precursor - bovine
N:Alternate names: prion protein, long variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 09-Sep-1994 #sequence revision 09-Sep-1994 #text change 09-Jul-2004
C/Accession: A54330; JT0953; JT0952; A48551; S07347; I46331
R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A:Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C-,
A:Reference number: A54330; MUID:91116314; PMID:1671225
A/Accession: A54330
A/Molecule type: DNA
A/Residues: 1-264 <GOL>
A/Cross-references: UNIPROT:PI0279; GB:X55882; NID:9663; PIDN:CAA3368.1; PID:9684
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0953
A/Accession: JT0953
A/Molecule type: DNA
A/Residues: 1-264 <YOS>

A/Cross-references: GB:D10613; NID:g217595; PIDN:BA01468.1; PID:g217596
 A/Accession: U70952
 A/Molecule type: DNA
 A/Residues: 1-217, 'K', 219-264 <X02>
 R/Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
 Virus Genomes 6, 343-356, 1992
 A/Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
 A/Reference number: A48551; MUID:93118243; PMID:1362024
 A/Accession: A48551
 A/Molecule type: mRNA
 A/Residues: 1-217, 'K', 219-264 <X03>
 A/Cross-references: GB:A001468; NID:g1888342; PIDN:BA019253.1; PID:g1888343
 A/Experimental source: brain
 A/Note: Sequence extracted from NCBI backbone (NCBIN:121620, NCBIPI:121621)
 R/Hope, J.; Reekie, L.J.D.; Hunter, N.; Multhaup, G.; Beyreuther, K.; White, H.; Scott, Nature 336, 390-392, 1988
 A/Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A/Reference number: S07347; MUID:89057122; PMID:2904126
 A/Accession: S07347
 A/Molecule type: protein
 A/Residues: 25-36 <H0P>
 R/Pruiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J. Infect. Dis. 167, 602-613, 1993
 A/Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
 A/Reference number: 146931; MUID:93179783; PMID:8440932
 A/Accession: 146931
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: mRNA
 A/Residues: 1-264 <PRU>
 A/Cross-references: GB:S55629; NID:g266111; PIDN:AA025514.1; PID:g266112
 A/Accession: 1-264 <PRU>
 A/Status: preliminary
 A/Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F.1-24/Domains: signal sequence #status predicted <SIG>
 F.25-264/Product: major prion protein 1 #status predicted <MAT>
 F.60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
 F.190-225/Disulfide bonds: #status predicted
 F.192-206/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 100.0%; Score 250; DB 2; Length 264;
 Best Local Similarity 100.0%; Pred. No. 2.5e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 46
 |||||
 DB 172 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 217

RESULT 3
 S37137
 prion protein - greater kudu
 C/Species: Trageilaphus strepsiceros (greater kudu)
 C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C/Accession: S37137
 R/Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A/Reference number: S37137
 A/Accession: S37137
 A/Status: preliminary
 A/Molecule type: DNA
 A/Residues: 1-264 <MAR>
 A/Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CA052781.1; PID:g39893
 C/Superfamily: major prion protein

Query Match 98.8%; Score 247; DB 2; Length 264;
 Best Local Similarity 97.8%; Pred. No. 5.9e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 46
 |||||
 DB 172 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 217

RESULT 4
 A53892
 prion-related protein - rat (fragment)
 C/Species: Rattus norvegicus (Norway rat)
 C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
 C/Accession: A53892
 R/Li, Y.C.; Tokes, Z.; Linn, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
 Lab. Invest. 57, 370-374, 1987
 A/Title: Cloning of rat "prion-related protein" cDNA.
 A/Reference number: A53892; MUID:88037055; PMID:2889848
 A/Accession: A53892
 A/Status: preliminary
 A/Molecule type: mRNA
 A/Residues: 1-226 <LTA>
 A/Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA1947.1; PID:g206392
 C/Superfamily: major prion protein

Query Match 98.0%; Score 245; DB 2; Length 226;
 Best Local Similarity 93.5%; Pred. No. 8.7e-23;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 46
 |||||
 DB 133 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 178

RESULT 5
 S71048
 major prion protein - Callitrichus moloch (fragment)
 C/Species: Callitrichus moloch
 C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C/Accession: S71048; S53632
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71048
 A/Molecule type: DNA
 A/Residues: 1-241 <SCH>
 A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AA050100.1; PID:g475585
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53632
 A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-203, 'R', 205-240 <SCH>
 A/Cross-references: EMBL:U08312
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 241;
 Best Local Similarity 93.5%; Pred. No. 9.4e-23;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 46
 |||||
 DB 154 VYRPVDOYSNONNFVHDCVNTTKVKEHTVTTTKGENTETDVKM 199

RESULT 6
 S71056
 major prion protein - mandrill (fragment)
 C/Species: Papio ephrix, Mandrillus ephrix (mandrill)
 C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
 C/Accession: S71056; S53621
 R/Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71056
 A/Molecule type: DNA
 A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 241;
Best Local Similarity 93.5%; Pred. No. 9.4e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 154 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 199

RESULT 7
S53627
major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53627; S71043
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 245;
Best Local Similarity 93.5%; Pred. No. 9.5e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 153 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 198

RESULT 8
S71045
major prion protein - Cercopithecus daane
C/Species: Cercopithecus daane
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 245;
Best Local Similarity 93.5%; Pred. No. 9.5e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 153 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 198

RESULT 9
S53631
major prion protein - brown capuchin
C/Species: Cebus apella (brown capuchin, black-capped capuchin)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53631; S71044
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53631
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-252 <SCH>
A/Cross-references: UNIPROT:P40249; EMBL:U08295
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71044
A/Molecule type: DNA
A/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:G474348; PIDN:AAC50084.1; PID:G474349
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 252;
Best Local Similarity 93.5%; Pred. No. 9.8e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 160 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 205

RESULT 10
S53624
major prion protein - stump-tailed macaque
C/Species: Macaca arctoides (stump-tailed macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53624; S71051
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53624
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08311
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71051
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08311; NID:G475583; PIDN:AAC50099.1; PID:G475584

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 206

RESULT 11

major prion protein - crab-eating macaque
C/Species: Macaca fascicularis (crab-eating macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53623; S71052
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53623
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08298
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71052
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08298; NID:g474354; PIDN:AACS0087.1; PID:g474355
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 206

RESULT 12

major prion protein - hamadryas baboon
C/Species: Papio hamadryas (hamadryas baboon)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53620; S71058
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53620
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08294
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71058
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08294; NID:g474346; PIDN:AACS0083.1; PID:g474347
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;

Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 206

RESULT 13

major prion protein - Japanese macaque
C/Species: Macaca fuscata (Japanese macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53625; S71053
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53625
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P40254; EMBL:U08301
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71053
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08301; NID:g474360; PIDN:AACS0090.1; PID:g474361
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNIITVKEHTVTTTTKGFNTETDVKM 206

RESULT 14

major prion protein precursor - rhesus macaque
C/Species: Macaca mulatta (rhesus macaque)
C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004
C/Accession: I64423; S53622; S71054
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; Di Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental tr
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I64423
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40254; EMBL:U15163; NID:g595850; PIDN:AAA6635.1; PID:g59586
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53622
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08307
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71054
A/Molecule type: DNA
A/Residues: 1-253 <SCW>
A/Cross-references: EMBL:U08307; NID:g474372; PIDN:AACS0095.1; PID:g474373
C/Superfamily: major prion protein

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;

C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
 Best Local Similarity 93.5%; Pred. No. 9.9e-23;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPPVQYSNQNPFVHDCVNTVKEHTVTTTGGKGFETDVKM 46
 |||||
 DB 161 VYRPPVQYSNQNPFVHDCVNTVKEHTVTTTGGKGFETDVKM 206

RESULT 15

S71055

major prion protein - pig-tailed macaque
 C;Species: Macaca nemestrina (pig-tailed macaque)

C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C;Accession: S71055; S53626

R;Schatzl, H.M.
 Submitted to the EMBL Data Library, April 1994

A;Reference number: S71041

A;Accession: S71055

A;Molecule type: DNA

A;Residues: 1-253 <SCW>

A;Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AC50094.1; PID:G4743

R;Schatzl, H.M.; da Costa, W.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A;Title: Prion protein gene variation among primates.

A;Reference number: S53614; MUID:95139066; PMID:7837269

A;Accession: S53626

A;Status: nucleic acid sequence not shown

A;Molecule type: DNA

A;Residues: 8-210; 'R', 212-247 <SCW>

A;Cross-references: EMBL:U08306

C;Superfamily: major prion protein

C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
 Best Local Similarity 93.5%; Pred. No. 9.9e-23;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPPVQYSNQNPFVHDCVNTVKEHTVTTTGGKGFETDVKM 46
 |||||
 DB 161 VYRPPVQYSNQNPFVHDCVNTVKEHTVTTTGGKGFETDVKM 206

Search completed: December 3, 2004, 00:38:42
 Job time : 14.8 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221
Sequence: 1 VYRPPVDQYSNONNFVHDCV.....HTVTTTKEGNETFDIKM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues
Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02: *
1: UniProt_sprot: *
2: UniProt_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	250	100.0	97	06EIP9	06EIP9 bos taurus
2	250	100.0	100	06EIQ2	06EIQ2 bos taurus
3	250	100.0	200	097912	097912 bison bonas
4	250	100.0	211	06J6V2	06J6V2 bos taurus
5	250	100.0	211	AA09128	AA09128 bos taurus
6	250	100.0	216	09TV00	09TV00 bos taurus
7	250	100.0	256	PRP2_BOVIN	PRP2_BOVIN
8	250	100.0	264	PRIO_BOVIN	PRIO_BOVIN
9	250	100.0	264	06UL03	06UL03 bos taurus
10	250	100.0	264	06UL04	06UL04 bos taurus
11	250	100.0	264	06UL05	06UL05 bos taurus
12	250	100.0	264	06UL06	06UL06 bos taurus
13	250	100.0	264	06UL07	06UL07 bos mutus g
14	250	100.0	264	06UL09	06UL09 bos taurus g
15	250	100.0	264	07YRN3	07YRN3 bos taurus
16	250	100.0	264	08G4M0	08G4M0 bos taurus
17	250	100.0	264	06EH52	06EH52 alluropoda
18	250	100.0	264	AA064642	AA064642 bos mutus
19	250	100.0	264	AA064643	AA064643 bos mutus
20	250	100.0	264	AA064644	AA064644 bos mutus
21	250	100.0	264	AA064645	AA064645 bos taurus
22	250	100.0	264	AA064646	AA064646 bos taurus
23	250	100.0	264	AA064647	AA064647 bos taurus
24	250	100.0	264	AA064648	AA064648 bos taurus
25	250	100.0	264	AA064649	AA064649 bos taurus
26	250	100.0	264	AA064650	AA064650 bos taurus
27	250	100.0	272	08MJ17	08MJ17 bos taurus
28	247	98.8	226	097907	097907 gazella sub
29	247	98.8	227	097909	097909 tragelaphus
30	247	98.8	256	PRP2_TRAST	PRP2_TRAST
31	247	98.8	264	PRP1_TRAST	PRP1_TRAST

32	245	98.0	215	2	097904	097904 bos javanic
33	245	98.0	238	1	PRIO_CERAT	095145 cervocobus
34	245	98.0	238	1	PRIO_THERG	095270 thecopithec
35	245	98.0	241	1	PRIO_CALMO	P40248 callicebus
36	245	98.0	241	1	PRIO_MANSB	P40255 mandillius
37	245	98.0	245	1	PRIO_CERAB	P40250 cervopithec
38	245	98.0	246	1	PRIO_CERMO	P61761 cervopithec
39	245	98.0	246	1	PRIO_CERNO	P61762 cervopithec
40	245	98.0	246	1	PRIO_CERPA	095176 cervocobus
41	245	98.0	246	1	PRIO_ERYPA	095174 erythrocebu
42	245	98.0	252	1	PRIO_CEBAP	P40249 cebus apell
43	245	98.0	253	1	PRIO_COLGU	P40251 colobus gue
44	245	98.0	253	1	PRIO_MACFA	P40254 macaca fasc
45	245	98.0	253	1	PRIO_PONPY	P40256 pongo pygma

ALIGNMENTS

RESULT 1									
ID	06EIP9	PRELIMINARY;	PRT;	97	AA.				
AC	06EIP9;								
DT	01-OCT-2004 (TREMBLrel. 28, Created)								
DT	01-OCT-2004 (TREMBLrel. 28, Last sequence update)								
DT	01-OCT-2004 (TREMBLrel. 28, Last annotation update)								
DE	Prion protein (Fragment).								
OS	Bos taurus (Bovine).								
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;								
OC	Bovinae; Bos.								
OX	NCBI_TaxID=9913;								
RN	(1)								
RP	SEQUENCE FROM N.A.								
RA	Zhang L., Li N., Fan B.;								
RL	Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.								
DR	EMBL: AY320374; AA094050.1; -								
KW	Prion.								
FT	NON_TER	1	97						
FT	NON_TER	97	97						
SQ	SEQUENCE	97	AA;	11714	MM;	24C8DC7072FE98CE	CRC64;		
Query Match Similarity 100.0%; Score 250; DB 2; Length 97;									
Best Local Similarity 100.0%; Pred No. 7.5e-24;									
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
Qy	1	VYRPPVDQYSNONNFVHDCVNIIVKSHVTTTITKGENFTETDIKMM	46						
Db	25	VYRPPVDQYSNONNFVHDCVNIIVKSHVTTTITKGENFTETDIKMM	70						
RESULT 2									
ID	06EIQ2	PRELIMINARY;	PRT;	100	AA.				
AC	06EIQ2;								
DT	01-OCT-2004 (TREMBLrel. 28, Created)								
DT	01-OCT-2004 (TREMBLrel. 28, Last sequence update)								
DT	01-OCT-2004 (TREMBLrel. 28, Last annotation update)								
DE	Prion protein (Fragment).								
OS	Bos taurus (Bovine).								
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;								
OC	Bovinae; Bos.								
OX	NCBI_TaxID=9913;								
RN	(1)								
RP	SEQUENCE FROM N.A.								
RA	Zhang L., Li N., Fan B.;								
RL	Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.								
DR	EMBL: AY320371; AA094047.1; -								
KW	Prion.								
FT	NON_TER	1	100						
FT	NON_TER	100	100						
SQ	SEQUENCE	100	AA;	12065	MM;	4AF40583CB5B4169	CRC64;		

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Best Local Similarity 100.0%; Pred. No. 7,8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 46
DB 29 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 74

RESULT 3
O97912 PRELIMINARY; PRT; 200 AA.
AC O97912;
DT 01-MAY-1999 (TREMBlrel. 10, Created)
DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE P101 protein (Fragment).
GN Name=P101;
OS Bison bonasus (European bison).
OC Buiaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bison.
OX NCBI_TaxID=9902;
RN (1)
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=9903687; PubMed=10373359;
RA Mopfer F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPc reveals high conservation
RT of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AF117328; AAD1999.1; -.
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4B85271B CRC64;

Query Match 100.0%; Score 250; DB 2; Length 200;
Best Local Similarity 100.0%; Pred. No. 1,7e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 46
DB 129 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 174

RESULT 4
O6J6V2 PRELIMINARY; PRT; 211 AA.
AC O6J6V2;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Buiaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;

Query Match 100.0%; Score 250; DB 2; Length 211;
Best Local Similarity 100.0%; Pred. No. 1,8e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 46
DB 141 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 186

RESULT 5
AAT09128 PRELIMINARY; PRT; 211 AA.
AC AAT09128;
DT 20-MAY-2004 (TREMBlrel. 27, Created)
DT 20-MAY-2004 (TREMBlrel. 27, Last sequence update)
DT 20-MAY-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Bos taurus (Bovine).
OC Buiaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN (1)
RP SEQUENCE FROM N.A.
RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
RA Wang Z., Wang C., Wu X.;
RT "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
RT cattle."
RL Zhongguo Dongwu Jiayi 19:21-22(2002).
RN (2)
RP SEQUENCE FROM N.A.
RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
RA Wang Z., Wang C., Wu X.;
RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY585239; AAT09128.1; -.
DR Prion.
KM Prion.
FT NON_TER
FT NON_TER
FT CHAIN
FT NON_TER
SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 211;
Best Local Similarity 100.0%; Pred. No. 1,8e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 46
DB 141 VYRPVDOYSONNFVHDCVNITVKEHTVTTTGTGENTETDIDKMM 186
```


DB 141 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGTGKGFETTDIKMM 186

RESULT 6

OC 09TV00 PRELIMINARY; PRT; 216 AA.

AC 09TV00; 01-MAY-2000 (TrEMBLrel. 13, Created)
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).

GN Name=Prp;

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=PBL;

RX MEDLINE=99030687; PubMed=10373359;

RA Kopfer F., Weidenhofer G., Schneider R., von Bruhn A., Gilch S.,

RA Schwarz T.F., Werner T., Schatzl H.M.,

RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation

of flexible regions of the prion protein."

RL J. Mol. Biol. 289:1163-1178(1999).

CC -1- SIMILARITY: Belongs to the prion family.

DR EMBL: A017327; A01998.1; -

DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.

DR GO: GO:0007165; P:signal transduction; IEA.

DR InterPro: IPR001610; PAC.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 6.

DR PRINTS; PR00341; PRION.

DR SMART; SM00086; PAC; 1.

DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Prion.

FT NON_TER 1 1

FT NON_TER 216 216

SQ SEQUENCE 216 AA; 23425 MW; BE6BECFA79966730 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 216;

Best Local Similarity 100.0%; Pred. No. 1.8e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGTGKGFETTDIKMM 46

DB 132 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGTGKGFETTDIKMM 177

RESULT 7

PRP2_BOVIN STANDARD; PRT; 256 AA.

AC 001860;

DT 01-JUN-1994 (Rel. 29, Created)

DT 01-JUN-1994 (Rel. 29, Last sequence update)

DT 29-MAR-2004 (Rel. 43, Last annotation update)

DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril

protein 2).

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

RX MEDLINE=93116243; PubMed=1362024;

RA Yoshimoto J., Ihnuma T., Ishiguro N., Horuchi M., Tamura M.,

RA Shinagawa M.;

RT "Comparative sequence analysis and expression of bovine PrP gene in

mouse L-929 cells."

RL Virus Genes 6:343-356(1992).

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the

host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

"rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Found in high quantity in the brain of humans and animals

infected with degenerative neurological diseases such as kuru,

Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome

(GSS), scrapie, bovine spongiform encephalopathy (BSE),

transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

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or send an email to license@isb-sib.ch).

CC EMBL: D10614; BA01469.1; -

DR PR; J00268; J00268.

DR HSSP; P10279; IDW.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS; PR00341; PRION.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

KW Signal.

FT SIGNAL 1 24

FT CHAIN 25 233

FT PROPEP 234 256

FT LIPID 233 233

FT CARBOHYD 184 184

FT CARBOHYD 200 200

FT DISULFID 182 217

FT DOMAIN 54 95

FT REPEAT 54 62

FT REPEAT 63 70

FT REPEAT 71 78

FT REPEAT 79 86

FT REPEAT 87 95

SQ SEQUENCE 256 AA; 27880 MW; OD969F2D9033B30 CRC64;

Query Match 100.0%; Score 250; DB 1; Length 256;

Best Local Similarity 100.0%; Pred. No. 2.2e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGTGKGFETTDIKMM 46

DB 164 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGTGKGFETTDIKMM 209

RESULT 8

PRIO_BOVIN STANDARD; PRT; 264 AA.

AC P10279;

DT 01-MAR-1989 (Rel. 10, Created)

DT 01-NOV-1991 (Rel. 20, Last sequence update)

DT 01-OCT-2004 (Rel. 45, Last annotation update)

DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril

protein 1).

GN Name=PRNP; Synonym=Prp;

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

CC Bovinae; Bos.
 OX NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian;
 RX MEDLINE=91116314; PubMed=1671225;
 RA Goldmann W., Hunter N., Martin T.,
 RT "Different forms of the bovine PrP gene have five or six copies of a
 RL short, G-C-rich element within the protein-coding exon.";
 RN J. Gen. Virol. 72:201-204(1991).
 RP [2]
 RC SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=93118243; PubMed=1362024;
 RA Yoshimoto T., Iinuma T., Ishiguro N., Horiuchi M., Imanura M.,
 RL Shingawa M.;
 RT "Comparative sequence analysis and expression of bovine PrP gene in
 RL mouse L-929 cells.";
 RN Virology 199:63-73(1992).
 RP [3]
 RC SEQUENCE FROM N.A.
 RX MEDLINE=93179783; PubMed=8440932;
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Taraboulos A.,
 RA Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.;
 RT "Immunologic and molecular biologic studies of prion proteins in
 RL bovine spongiform encephalopathy.";
 RN J. Infect. Dis. 167:602-613(1993).
 RP [4]
 RC SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian; TISSUE=Brain;
 RA Horiuchi M.;
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RC SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RX MEDLINE=21422903; PubMed=11531705;
 RA Hills D., Comincini S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.;
 RT "Complete genomic sequence of the bovine prion gene (PrNP) and
 RL polymorphism in its promoter region.";
 RN Anim. Genet. 32:231-232(2001).
 RP [6]
 RC SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.;
 RT "Nucleotide sequence of PrP cDNA in Korean cattle.";
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RC SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.;
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RC SEQUENCE OF 25-36.
 RX MEDLINE=89057122; PubMed=2904126;
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RL associated protein.";
 RN Nature 336:390-392(1988).
 RP [9]
 RC STRUCTURE BY NMR OF 132-241.
 RX MEDLINE=20359707; PubMed=10899999;
 RA Lopez Garcia F., Zahn R., Riek R., Wuthrich K.;
 RT "NMR structure of the bovine prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339(2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; X55882; CAA93368.1; -;
 DR EMBL; D10612; BAA01467.1; -;
 DR EMBL; D10613; BAA01468.1; -;
 DR EMBL; S55629; AAB25514.1; -;
 DR EMBL; AB001468; BAA19253.1; -;
 DR EMBL; AJ298878; CAC37367.1; -;
 DR EMBL; AF517842; AAM66709.1; -;
 DR EMBL; D26151; BAA05138.1; -;
 DR PIR; A54330; A54330.
 DR PDB; 1DMY; NMR; A=130-241.
 DR PDB; 1DMZ; NMR; A=130-241.
 DR PDB; 1DX0; NMR; A=23-241.
 DR PDB; 1DX1; NMR; A=23-241.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion_octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION 1; 1.
 DR PROSITE; PS00706; PRION 2; 1.
 KW 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
 KW Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 25 241
 FT PROPEP 242 264
 FT LIPID 241 241
 FT CARBOHYD 192 192
 FT CARBOHYD 208 208
 FT DISULFID 190 225
 FT DOMAIN 54 103
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 FT VARIANT 71 78
 FT CONFLICT 218 218
 FT HELIX 136 138
 FT STRAND 140 141
 FT STRAND 141 141
 FT HELIX 155 162
 FT TURN 163 164
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 FT TURN 204 206
 FT HELIX 211 237
 SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
 Query Match 100.0%; Score 250; DB 1; Length 264;
 Best Local Similarity 100.0%; Pred. No. 2,3e-23; Indels 0; Gaps 0;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 VYRPVQYNSNNNFVHDCVNIIVKHTVTTTGTGKGFETDTRKM 46
 Db 172 VYRPVQYNSNNNFVHDCVNIIVKHTVTTTGTGKGFETDTRKM 217
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 Q6UL03 PRELIMINARY; PRT; 264 AA.

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AC 06UL03;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367643; AA06450.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB26EFD0E CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 46
Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 217

RESULT 10
06UL04 PRELIMINARY; PRT; 264 AA.
AC 06UL04;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367642; AA06464.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; P90214038316A101 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 46
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Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 217

RESULT 11
06UL05 PRELIMINARY; PRT; 264 AA.
AC 06UL05;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367640; AA06464.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 46
Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKM 217

RESULT 12
06UL06 PRELIMINARY; PRT; 264 AA.
AC 06UL06;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367639; AA06464.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
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SQ SEQUENCE 264 AA; 28584 MW; D06747B5374541D0 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 46
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DB 172 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 217

RESULT 13
O6UL07 PRELIMINARY; PRT; 264 AA.
ID O6UL07;
AC O6UL07;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Mu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367637; AAQ64644.1; -.
DR EMBL; AY327450; AAQ63321.1; -.
DR EMBL; AY367636; AAQ64643.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 46
    |||||
DB 172 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 217

RESULT 14
O6UL09 PRELIMINARY; PRT; 264 AA.
ID O6UL09;
AC O6UL09;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.

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RC TISSUE=Blood;
RA Mu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367635; AAQ64642.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; 1A909F038304293C CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 46
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DB 172 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 217

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AC O7YRN3;
DT 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Prion protein precursor Prp.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=14722726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keeler J.W., Snelling W.M., Fox J.M., Chitko-McKown C.G.,
RA Laegreid W.W.;
RT "Prion gene sequence variation within diverse groups of U.S. sheep,
RT beef cattle, and deer."
RL Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY35912; AAP84097.1; -.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion; Signal.
FT SIGNAL 1
SQ SEQUENCE 264 AA; 28660 MW; F28D53C47205BF5 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 46
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DB 172 VYRPVDDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDIKM 217

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Job time : 75.3541 secs

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Fri Dec 3 10:54:01 2004

us-10-031-975-24_copy_176_221.rup

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
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Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
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4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep: *
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6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	250	100.0	219	4	US-09-380-015B-2
2	250	100.0	263	1	US-08-242-188-3
3	250	100.0	263	1	US-08-509-261A-3
4	250	100.0	263	1	US-08-660-626-9
5	250	100.0	263	1	US-08-692-892-3
6	250	100.0	263	2	US-08-713-939A-3
7	250	100.0	263	2	US-08-868-162A-23
8	250	100.0	263	3	US-09-031-168-9
9	250	100.0	263	3	US-09-036-579-3
10	250	100.0	263	3	US-09-550-374-3
11	250	100.0	263	4	US-09-943-906-3
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13	250	100.0	264	3	US-09-128-450-21
14	250	100.0	264	3	US-09-823-494-21
15	250	100.0	264	4	US-09-431-887-24
16	250	100.0	264	4	US-09-627-218B-11
17	247	98.8	264	4	US-09-431-887-27
18	245	98.0	245	4	US-09-431-887-5
19	245	98.0	245	4	US-09-431-887-15
20	245	98.0	252	4	US-09-431-887-17
21	245	98.0	253	4	US-09-431-887-3
22	245	98.0	253	4	US-09-431-887-7
23	245	98.0	253	4	US-09-431-887-9
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25	245	98.0	253	4	US-09-431-887-11
26	245	98.0	253	4	US-09-431-887-12
27	245	98.0	253	4	US-09-431-887-14

28	245	98.0	253	4	US-09-431-887-16	Sequence 16, Appl
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31	245	98.0	254	1	US-08-509-261A-1	Sequence 1, Appl
32	245	98.0	254	1	US-08-660-626-7	Sequence 7, Appl
33	245	98.0	254	1	US-08-692-892-1	Sequence 1, Appl
34	245	98.0	254	2	US-08-713-939A-1	Sequence 1, Appl
35	245	98.0	254	2	US-08-868-162A-21	Sequence 21, Appl
36	245	98.0	254	3	US-09-031-168-7	Sequence 19, Appl
37	245	98.0	254	3	US-09-128-450-19	Sequence 28, Appl
38	245	98.0	254	3	US-09-128-450-28	Sequence 1, Appl
39	245	98.0	254	3	US-09-036-579-1	Sequence 1, Appl
40	245	98.0	254	3	US-09-823-494-19	Sequence 28, Appl
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43	245	98.0	254	4	US-09-431-887-20	Sequence 21, Appl
44	245	98.0	254	4	US-09-431-887-21	Sequence 10, Appl
45	245	98.0	254	4	US-09-627-218B-10	

ALIGNMENTS

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RESULT 1
US-09-380-015B-2
; Sequence 2, Application US/09380015B
; Patent No. 6765088
; GENERAL INFORMATION:
; APPLICANT: Carsten Korth
; TITLE OF INVENTION: Immunological Detection of Prions
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kanton Zuerich vertreten durch die Erziehungsdirektion
; STREET: Waichetor
; CITY: Zuerich
; STATE: Zuerich
; COUNTRY: Switzerland
; ZIP: CH-8090
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/380,015B
; FILING DATE: 23-Aug-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 97102837.8
; FILING DATE: 21-FEB-1997
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 219 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHEetical: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Bos taurus
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2
Query Match 100.0%; Score 250; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 9.3e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Ox 1 VYRRPYDQYSGNNFVHDCVITVTKGENTETDIXKM 46
Db 149 VYRRPYDQYSGNNFVHDCVITVTKGENTETDIXKM 194
RESULT 2
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US-08-242-188-3
; Sequence 3, Application US/08242188
; Patent No. 5555186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bozicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PC-DOS/MS-DOS
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: BOVINE PRION PROTEIN, BODYP
; US-08-242-188-3
Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 VYRPVQYSNONNFVHDCVNIIVKHEHTVTTTGGNFETETDIKMM 46
Db 171 VYRPVQYSNONNFVHDCVNIIVKHEHTVTTTGGNFETETDIKMM 216
RESULT 3
US-08-509-261A-3
; Sequence 3, Application US/08509261A
; Patent No. 5763244
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: Method of Detecting Prions
; TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Avenue, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Pastero for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/509,261A
; FILING DATE: 31-JUL-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 6510-030001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-327-3400
; TELEFAX: 650-327-3231
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-509-261A-3
Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 VYRPVQYSNONNFVHDCVNIIVKHEHTVTTTGGNFETETDIKMM 46
Db 171 VYRPVQYSNONNFVHDCVNIIVKHEHTVTTTGGNFETETDIKMM 216
RESULT 4
US-08-660-626-9
; Sequence 9, Application US/08660626
; Patent No. 5789655
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Glenn C. Telling
; APPLICANT: Fred B. Cohen
; APPLICANT: Michael R. Scott
; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
; TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Asciti
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,626
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeha Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 46
Db 171 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 216

RESULT 5
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996

CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3

Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 46
Db 171 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 216

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3

Query Match 100.0%; Score 250; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 46
Db 171 VYRPPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDK 216

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 596269
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 250; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDYNSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKMM 46
DB 171 VYRPVDDYNSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKMM 216

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIPOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: FASTSEQ
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 250; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDYNSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKMM 46
DB 171 VYRPVDDYNSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKMM 216

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3

Query Match 100.0%; Score 250; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 250; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 216

RESULT 13

US-09-128-450-21
Sequence 21, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 250; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

RESULT 14

US-09-823-494-21
Sequence 21, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 250; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46

DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 250; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

Search completed: December 3, 2004, 00:18:59
Job time : 18.4197 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
Sequence: 1 VYRPVDQXSNQNNFVHDCV.....HTVTTTKGENTFEDIKRM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

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20: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	250	100.0	117	14	US-10-050-902-349
2	250	100.0	117	14	US-10-050-898-349
3	250	100.0	117	14	US-10-346-190-90
4	250	100.0	161	9	US-09-745-003-9
5	250	100.0	256	13	US-10-109-551-2
6	250	100.0	256	16	US-10-479-218-3
7	250	100.0	263	9	US-09-943-906-3
8	250	100.0	263	14	US-10-435-602-3
9	250	100.0	264	9	US-09-823-494-21
10	250	100.0	264	14	US-10-209-194-2
11	250	100.0	264	14	US-10-355-780-11
12	250	100.0	264	14	US-10-304-630-24
13	250	100.0	264	14	US-10-301-488A-30

14	250	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	250	100.0	264	14	US-10-410-907A-13	Sequence 13, Appl
16	250	100.0	264	14	US-10-346-190-80	Sequence 80, Appl
17	250	100.0	264	14	US-10-417-964A-19	Sequence 19, Appl
18	250	100.0	264	15	US-10-301-448-33	Sequence 30, Appl
19	250	100.0	264	15	US-10-301-448-33	Sequence 33, Appl
20	250	100.0	264	16	US-10-479-218-2	Sequence 27, Appl
21	247	98.8	264	14	US-10-304-630-17	Sequence 32, Appl
22	246	98.8	264	14	US-10-417-964A-32	Sequence 324, App
23	245	98.0	124	14	US-10-050-902-324	Sequence 93, Appl
24	245	98.0	124	14	US-10-050-898-324	Sequence 12, Appl
25	245	98.0	124	14	US-10-346-190-93	Sequence 25, Appl
26	245	98.0	164	9	US-09-745-003-12	Sequence 121, App
27	245	98.0	225	15	US-10-301-448A-25	Sequence 5, Appl
28	245	98.0	225	15	US-10-301-448-25	Sequence 15, Appl
29	245	98.0	226	14	US-10-205-194-121	Sequence 17, Appl
30	245	98.0	245	14	US-10-304-630-15	Sequence 14, Appl
31	245	98.0	245	14	US-10-304-630-15	Sequence 17, Appl
32	245	98.0	252	14	US-10-304-630-17	Sequence 3, Appl
33	245	98.0	253	14	US-10-304-630-3	Sequence 9, Appl
34	245	98.0	253	14	US-10-304-630-7	Sequence 10, Appl
35	245	98.0	253	14	US-10-304-630-9	Sequence 11, Appl
36	245	98.0	253	14	US-10-304-630-10	Sequence 12, Appl
37	245	98.0	253	14	US-10-304-630-11	Sequence 14, Appl
38	245	98.0	253	14	US-10-304-630-12	Sequence 16, Appl
39	245	98.0	253	14	US-10-304-630-14	Sequence 18, Appl
40	245	98.0	253	14	US-10-304-630-16	Sequence 19, Appl
41	245	98.0	253	14	US-10-304-630-18	Sequence 28, Appl
42	245	98.0	254	9	US-09-823-494-19	Sequence 1, Appl
43	245	98.0	254	9	US-09-823-494-28	Sequence 5, Appl
44	245	98.0	254	9	US-09-943-906-1	
45	245	98.0	254	13	US-10-106-574-5	

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 46
Db 40 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 85

RESULT 2

US-10-050-898-349
; Sequence 349, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisack, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Plosek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 349
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-898-349

Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 46
Db 40 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 85

RESULT 3

US-10-346-190-90
; Sequence 90, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 90
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified Bovine Prion Protein Fragment
US-10-346-190-90

Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 46
Db 40 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 85

RESULT 4

US-09-745-003-9
; Sequence 9, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: P1P2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 161
; TYPE: PRT
; ORGANISM: bovine
US-09-745-003-9

Query Match 100.0%; Score 250; DB 9; Length 161;
Best Local Similarity 100.0%; Pred. No. 6,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 46
Db 69 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGGKGFETDIDKMM 114

RESULT 5

US-10-109-551-2
; Sequence 2, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TANK.2070S
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Bos taurus
US-10-109-551-2

Query Match 100.0%; Score 250; DB 13; Length 256;

Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 46
164 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 209

RESULT 6

US-10-479-218-3
Sequence 3, Application US/10479218
Publication No. US20040171082A1

GENERAL INFORMATION:
APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)

APPLICANT: Jeffrey, Martin

TITLE OF INVENTION: Diagnostic method

FILE REFERENCE: CG/P/135/WOD

CURRENT APPLICATION NUMBER: US/10/479,218

PRIOR FILING DATE: 2003-12-01

PRIOR APPLICATION NUMBER: GB 0113156.4

NUMBER OF SEQ ID NOS: 20

SOFTWARE: PatentIn version 3.1

SEQ ID NO 3

LENGTH: 256

TYPE: PRT

ORGANISM: Ovis aries

US-10-479-218-3

Query Match 100.0%; Score 250; DB 16; Length 256;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 46
164 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 209

RESULT 7

US-09-943-906-3

Sequence 3, Application US/09943906
Patent No. US20020150571A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

Williamson, R. Anthony

Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP

NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28, 807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 263 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 3:

US-09-943-906-3

Query Match 100.0%; Score 250; DB 9; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 46
171 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 216

RESULT 8

US-10-435-602-3

Sequence 3, Application US/10435602
Publication No. US20030228303A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

Williamson, R. Anthony

Burton, Dennis R.

TITLE OF INVENTION: Antibodies Specific for Native PrP^{Sc}

FILE REFERENCE: UCAL059CON3

CURRENT APPLICATION NUMBER: US/10/435,602

PRIOR FILING DATE: 2003-05-09

PRIOR APPLICATION NUMBER: 09/943,906

PRIOR FILING DATE: 2001-08-30

PRIOR APPLICATION NUMBER: 09/550,374

PRIOR FILING DATE: 2000-04-13

PRIOR APPLICATION NUMBER: 09/036,579

PRIOR FILING DATE: 1998-03-06

PRIOR APPLICATION NUMBER: 08/713,939

PRIOR FILING DATE: 1996-09-13

PRIOR APPLICATION NUMBER: 08/528,104

PRIOR FILING DATE: 1995-09-14

NUMBER OF SEQ ID NOS: 86

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 263

TYPE: PRT

ORGANISM: bovine

US-10-435-602-3

Query Match 100.0%; Score 250; DB 14; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 46
171 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIKMM 216

RESULT 9

US-09-823-494-21

Sequence 21, Application US/09823494
Publication No. US20010041790A1

GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W

Caughey, Byron W

APPLICANT: Chabry, Joelle

APPLICANT: Piola, Susette

TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion

FILE REFERENCE: 50121

CURRENT APPLICATION NUMBER: US/09/823,494

/ CURRENT FILING DATE: 2001-03-30
 / PRIOR APPLICATION NUMBER: 09/128,450
 / PRIOR FILING DATE: 1998-08-03
 / NUMBER OF SEQ ID NOS: 29
 / SOFTWARE: Patent In Ver. 2.0
 / SEQ ID NO 21
 / LENGTH: 264
 / TYPE: PRT
 / ORGANISM: Bos taurus
 / US-09-823-494-21

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 217

RESULT 10
 / US-10-209-194-2
 / Sequence 2, Application US/10209194
 / Publication No. US20030051264A1
 / GENERAL INFORMATION:
 / APPLICANT: LILJEDAHN, MONIKA
 / APPLICANT: ASPLAND, SIMON ERIC
 / TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
 / TITLE OF INVENTION: SUSCEPTIBILITY TO MAD COW DISEASE
 / FILE REFERENCE: BIOBANK.007A
 / CURRENT APPLICATION NUMBER: US/10/209,194
 / CURRENT FILING DATE: 2002-07-29
 / PRIOR APPLICATION NUMBER: 60/309,222
 / PRIOR FILING DATE: 2001-07-31
 / PRIOR APPLICATION NUMBER: 60/367,091
 / PRIOR FILING DATE: 2002-03-21
 / NUMBER OF SEQ ID NOS: 15
 / SOFTWARE: FastSeq for Windows Version 4.0
 / SEQ ID NO 2
 / LENGTH: 264
 / TYPE: PRT
 / ORGANISM: Bos Taurus
 / US-10-209-194-2

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 217

RESULT 11
 / US-10-355-780-11
 / Sequence 11, Application US/10355780
 / Publication No. US20030143224A1
 / GENERAL INFORMATION:
 / APPLICANT: Pusineri, Stanley
 / APPLICANT: Safar, Jiri
 / APPLICANT: Williamson, Anthony
 / APPLICANT: Burton, Dennis
 / TITLE OF INVENTION: Antibodies Specific for Ungulate Prp
 / FILE REFERENCE: UCAL-194
 / CURRENT APPLICATION NUMBER: US/10/355,780
 / CURRENT FILING DATE: 2003-01-30
 / PRIOR APPLICATION NUMBER: US/09/627,218B
 / PRIOR FILING DATE: 2000-07-27
 / NUMBER OF SEQ ID NOS: 11
 / SOFTWARE: FastSeq for Windows Version 4.0
 / SEQ ID NO 11
 / LENGTH: 264
 / TYPE: PRT

/ ORGANISM: Bos taurus
 / US-10-355-780-11

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 46
 DB 171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 216

RESULT 12
 / US-10-304-630-24
 / Sequence 24, Application US/10304630
 / Publication No. US20030161836A1
 / GENERAL INFORMATION:
 / APPLICANT: D-gen Limited
 / TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 / TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
 / FILE REFERENCE: ICOT/P21952
 / CURRENT APPLICATION NUMBER: US/10/304,630
 / CURRENT FILING DATE: 2002-11-26
 / PRIOR APPLICATION NUMBER: US/09/431,887
 / PRIOR FILING DATE: 1999-11-02
 / PRIOR APPLICATION NUMBER: GB 9824091.4
 / PRIOR FILING DATE: 1999-11-04
 / NUMBER OF SEQ ID NOS: 37
 / SOFTWARE: Patent In Ver. 2.0
 / SEQ ID NO 24
 / LENGTH: 264
 / TYPE: PRT
 / ORGANISM: Bos taurus
 / US-10-304-630-24

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGENTFTDIDKM 217

RESULT 13
 / US-10-301-488A-30
 / Sequence 30, Application US/10301488A
 / Publication No. US2003016558A1
 / GENERAL INFORMATION:
 / APPLICANT: FRANGIONE, Blas
 / APPLICANT: WISNIEWSKI, Thomas
 / APPLICANT: SIGURDSSON, Einar
 / TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 / TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN AMLIN,
 / TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 / TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 / FILE REFERENCE: 5986/1K434US1
 / CURRENT APPLICATION NUMBER: US/10/301,488A
 / CURRENT FILING DATE: 2002-11-21
 / PRIOR APPLICATION NUMBER: US 60/331,801
 / PRIOR FILING DATE: 2001-11-21
 / NUMBER OF SEQ ID NOS: 55
 / SOFTWARE: Patent In Version 3.1
 / SEQ ID NO 30
 / LENGTH: 264
 / TYPE: PRT
 / ORGANISM: Cow
 / US-10-301-488A-30

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 46
 DB 172 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 217

RESULT 14
 US-10-301-488A-33
 ; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGURDSSON, Elmar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc.feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

US-10-301-488A-33

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 46
 DB 172 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 217

RESULT 15
 US-10-410-907A-13
 ; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13

; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus (bovine)
 ; US-10-410-907A-13

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 46
 DB 172 VYRPVQDYSNONNFVHDCVNTVKEHTVTTTGGNFETEDIKM 217

Search completed: December 3, 2004, 01:07:48
 Job time: 54.4459 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216,658 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	197	100.0	117	5	ABG94358 Modified
2	197	100.0	117	5	ABG80670 Bovine pr
3	197	100.0	117	7	ADD24197 Modified
4	197	100.0	217	3	ABO7317 Cattle pr
5	197	100.0	217	3	ABO7328 Cattle pr
6	197	100.0	219	2	AAW70261 Bovine pr
7	197	100.0	219	2	AAW93571 Bovine pr
8	197	100.0	256	6	ABP57900 Bovine BS
9	197	100.0	263	2	AA86716 Bovine pr
10	197	100.0	263	2	AAW69661 Bovine pr
11	197	100.0	263	2	AAW65902 Bovine pr
12	197	100.0	263	4	AA65854 Bovine pr
13	197	100.0	263	4	ABP51788 Bovine pr
14	197	100.0	263	6	ABU58869 Bovine pr
15	197	100.0	263	6	AAE33228 Bovine pr
16	197	100.0	263	8	ADK15534 Bovine pr
17	197	100.0	264	2	AAV07995 Bovine pr
18	197	100.0	264	4	AA861769 Bovine pr
19	197	100.0	264	4	AA882113 Bovine pr
20	197	100.0	264	5	ABO4424 Bovine pr
21	197	100.0	264	5	AAE15604 Bovine pr
22	197	100.0	264	6	ABU07876 Bovine pr
23	197	100.0	264	6	AAE36754 Cow prion
24	197	100.0	264	6	ABP55139 Bovine pr
25	197	100.0	264	6	ABR42798 Bovine pr

26	197	100.0	264	6	ABR42801 Cattle pr
27	197	100.0	264	7	ADD24187 Bovine pr
28	197	100.0	264	7	AD86886 Bovine w
29	197	100.0	264	7	AD86886 Bovine w
30	197	100.0	264	8	ADH44555 Bovine pr
31	197	100.0	264	8	ADH44555 Bovine pr
32	197	100.0	264	8	ADK15535 Bovine pr
33	197	100.0	264	8	ADL15208 Bovine pr
34	197	100.0	265	5	AAW50889 Bovine pr
35	194	98.5	255	2	AA86717 Cow prion
36	194	98.5	255	2	AA86717 Sheep pr
37	194	98.5	255	2	AAW69662 Sheep pr
38	194	98.5	255	2	AAW69662 Sheep pr
39	194	98.5	255	5	AAW65903 Sheep pr
40	194	98.5	255	5	AAW65903 Sheep pr
41	194	98.5	255	6	AAW65855 Ovine pr
42	194	98.5	255	8	AAW65855 Ovine pr
43	194	98.5	256	4	AA872362 Sheep pr
44	194	98.5	256	4	AA872365 Goat pr
45	194	98.5	256	4	AAE08572 Oryx dem

ALIGNMENTS

RESULT 1
ID ABG94358 standard; protein; 117 AA.
XX
AC ABG94358;
XX
DT 06-AUG-2003 (revised)
DT 10-DEC-2002 (first entry)
XX
DE Modified bovine prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycemic; antigen array;
KW vaccine; infectious disease.
XX
OS Bos taurus.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002MO-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisoe A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
PS WPI; 2002-627351/67.
XX
DR Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
FT Diseases.
XX
CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organizer comprising
CC at least one first attachment site, where the organizer is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment


```

PN      WO2003059386-A2.
XX
XX      24-JUL-2003.
XX
XX      17-JAN-2003; 2003WO-EP000460.
XX
XX      18-JAN-2002; 2002US-00050902.
XX      21-JAN-2002; 2002WO-1B000166.
XX      08-JUL-2002; 2002US-0393725P.
XX      18-JUL-2002; 2002US-0396590P.
XX
XX      (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX      Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX      WPI; 2003-598483/56.
XX
XX      A vaccine composition for preventing or treating prion diseases (e.g.
XX      Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX      phage) and at least one prion protein or peptide bound to the virus-like
XX      particle.
XX
XX      Disclosure; SEQ ID NO 90; 246pp; English.
XX
XX      This invention relates to a novel vaccine composition comprising a virus-
XX      like or a core particle with at least one first attachment site and at
XX      least one antigen or antigenic determinant that is a prion protein (PrP)
XX      or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX      being bound to the virus-like or core particle. The vaccine of the
XX      invention may have neuroprotective or antiinflammatory activity. The
XX      composition is useful as a medicament or in manufacturing a medicament
XX      for the treatment or prevention of prion diseases. The prion diseases may
XX      include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX      Disease. The present sequence is the amino acid sequence of a modified
XX      bovine prion protein (PrP) which may be used during the creation of the
XX      vaccine composition of the invention.
XX
XX      Sequence 117 AA:
XX
XX      Query Match          100.0%; Score 197; DB 7; Length 117;
XX      Best Local Similarity 100.0%; Pred. No. 1.2e-19;
XX      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      1 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTGGENFT 36
XX      43 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTGGENFT 78
XX
XX      RESULT 4
XX      ID AAB07317 standard; protein; 217 AA.
XX
XX      AAB07317;
XX
XX      12-SEP-2003 (revised)
XX      17-OCT-2000 (first entry)
XX
XX      Cattle prion protein sequence.
XX
XX      Cattle; prion protein; transmissible spongiform encephalopathy;
XX      bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX      Bos taurus.
XX
XX      Key Location/Qualifiers
XX      Region 37..79
XX      /note= "Repeat region consisting of tandem repeats of
XX      repeat unit: PHGGGWGQ (AAB07319)"
XX      Disulfide-bond 166..201
XX      Modified-site 217
XX      /note= "C-terminal phospho-inositol glycolipid membrane
XX      anchor (-GPI)"

```

```

PN      WO200029850-A1.
XX
XX      25-MAY-2000.
XX
XX      27-OCT-1999; 99WO-FI000897.
XX
XX      17-NOV-1998; 98FI-00002481.
XX
XX      (WALL-) WALLAC OY.
XX      (BBSR-) BBSRC OFFICE.
XX
XX      Hope J, Barnard GJR, Birkett CR;
XX      WPI; 2000-387880/33.
XX
XX      Novel immunoassay for prion protein, used for the determination of
XX      transmissible spongiform encephalopathies in bovines.
XX
XX      Disclosure; Page 42-43; 50pp; English.
XX
XX      The present sequence is the cattle prion protein (PrP) sequence.
XX      Conversion of the normal cellular form of PrP into an aggregated,
XX      insoluble isoform is implicated in the pathogenesis of Transmissible
XX      Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX      Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX      and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX      this protein in body fluid or tissue samples may be measured by an assay
XX      of the present invention, in which a PrP epitope is captured by an
XX      antibody, which is then detected. The presence of PrP indicates BSE. PrP
XX      epitopes (AAB07320-B07326) are derived from the protease resistant core
XX      of PrP that is occluded when the PrP is in an aggregated state. (Updated
XX      on 12-SEP-2003 to standardise OS field)
XX
XX      Sequence 217 AA:
XX
XX      Query Match          100.0%; Score 197; DB 3; Length 217;
XX      Best Local Similarity 100.0%; Pred. No. 2.5e-19;
XX      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      1 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTGGENFT 36
XX      151 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTGGENFT 186
XX
XX      RESULT 5
XX      ID AAB07328 standard; protein; 217 AA.
XX
XX      AAB07328;
XX
XX      12-SEP-2003 (revised)
XX      17-OCT-2000 (first entry)
XX
XX      Cattle prion protein sequence.
XX
XX      Cattle; prion protein; transmissible spongiform encephalopathy;
XX      bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX
XX      Bos taurus.
XX
XX      Key Location/Qualifiers
XX      Region 37..79
XX      /note= "Repeat region consisting of tandem repeats of
XX      repeat unit: PHGGGWGQ (AAB07319)"
XX      Disulfide-bond 166..201
XX      Modified-site 217
XX      /note= "C-terminal phospho-inositol glycolipid membrane
XX      anchor (-GPI)"
XX
XX      WO200029849-A1.
XX      25-MAY-2000.

```

PF 27-OCT-1999; 99MO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALI-) WALIAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 XX WPI, 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;
 XX
 Query Match 100.0%; Score 197; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
 DB 151 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 186
 XX
 RESULT 6
 AAW70261
 ID AAW70261 standard; protein; 219 AA.
 XX
 AC AAW70261;
 XX
 DT 13-NOV-1998 (first entry)
 XX
 DE Bovine prion protein.
 XX
 KW prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;
 KW prion disease detection; bovine spongiform encephalopathy; therapy;
 KW Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KW Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 XX
 PN EP861900-A1.
 XX
 PD 02-SEP-1998.
 XX
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ERZI-) ERZIHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korth C, Stierli B, Moser M, Streiff P, Oesch B;
 XX
 XX WPI; 1998-449112/39.
 DR N-PSDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine, spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 XX Disclosure; Page 20-21; 35pp; English.
 XX
 CC This sequence represents the bovine prion protein (PrP). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrPc) and disease-specific prion protein (PrPsc) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific PrP in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;
 XX
 Query Match 100.0%; Score 197; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
 DB 152 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 187
 XX
 RESULT 7
 AAW93571
 ID AAW93571 standard; protein; 219 AA.
 XX
 AC AAW93571;
 XX
 DT 17-JUN-1999 (first entry)
 XX
 DE Bovine rBPrP protein.
 XX
 KW Prion protein; PrP; rBPrP; disease specific isoform; PrP(Sc); vaccine;
 KW treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KW detection.
 XX
 OS Bos taurus.
 XX
 PN DE19741607-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 XX
 PI Moser M, Oesch B, Korth C;
 XX
 XX WPI; 1999-205964/18.
 DR
 XX
 PT New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. Scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" PrP (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
 CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
 CC for diagnosis of scrapie, BSE, Kuur and Creutzfeldt-Jacob disease. The
 CC polypeptides are also useful in pharmaceutical or chemical libraries for
 CC detection of PrP(Sc)-specific agents

XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 197; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36
 |||
 DB 152 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 187

RESULT 8
 ABP57900

ID ABP57900 standard; protein; 256 AA.

XX
 AC ABP57900;

XX
 DT 12-FEB-2003 (first entry)

XX
 DE Bovine BSE-resistant prion protein.

XX
 KM Transmissible spongiform encephalopathy; neuroprotective; prion protein;
 KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;
 KM TSE.

XX
 OS Bos taurus.

XX
 PN MO200279416-A2.

XX
 PD 10-OCT-2002.

XX
 PF 28-MAR-2002; 2002MO-US009652.

XX
 PR 30-MAR-2001; 2001US-0280549P.

XX
 PA (TEXA) UNITV TEXAS A & M SYSTEM.

XX
 PI Dunne PW, Piedrahita J;

XX
 DR WPI; 2003-092895/08.

XX
 N-PSDB; ABV99701.

XX
 PT New transgenic bovine and cervid useful for producing animals which are
 PT resistant to bovine spongiform encephalopathy and transmissible
 PT spongiform encephalopathy disease, comprise a transgene encoding a mutant
 PT PrP polypeptide.

XX
 PS Claim 1; Fig 6; 98pp; English.

XX
 CC The invention relates to a novel transgenic bovine/cervid comprising a
 CC transgene encoding a mutant prion protein (PrP) polypeptide, in which a
 CC substitution has been made at position 171 of the sequence, which renders
 CC the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and
 CC transmissible spongiform encephalopathy (TSE) disease, respectively. The
 CC transgene of the invention has neuroprotective activity. The method is
 CC useful for producing a transgenic bovine or cervid resistant to BSE and
 CC TSE diseases. The bovine prion gene is useful for producing transgenic
 CC cattle exhibiting resistance to bovine spongiform encephalopathy. The
 CC sequence represents the mutant bovine PrP polypeptide

XX
 SQ Sequence 256 AA;

Query Match 100.0%; Score 197; DB 6; Length 256;
 Best Local Similarity 100.0%; Pred. No. 3e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36

|||
 DB 174 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 209

RESULT 10
 ID AAW69661 standard; protein; 263 AA.

XX
 AC AAW69661;

XX
 DT 25-MAR-2003 (revised)

XX
 DT 19-OCT-1998 (first entry)

XX
 DE Bovine prion protein BoPrP.

XX
 KM Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

XX
 SQ Sequence 263 AA;

Query Match 100.0%; Score 197; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 3.1e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36

|||
 DB 174 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 209

RESULT 10
 ID AAW69661 standard; protein; 263 AA.

XX
 AC AAW69661;

XX
 DT 25-MAR-2003 (revised)

XX
 DT 19-OCT-1998 (first entry)

XX
 DE Bovine prion protein BoPrP.

XX
 KM Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

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OS Bos sp.
XX
XX US5792901-A.
XX
XX 11-AUG-1998.
XX
XX 30-JUL-1996; 96US-00692892.
XX
XX 13-MAY-1994; 94US-00242188.
XX 31-JUL-1995; 95US-00509261.
XX 31-AUG-1995; 95US-00521992.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Scott MR, Telling GC, Prusiner SB;
XX
XX WPI; 1998-456207/39.
XX
XX Transgenic mouse with altered PrP gene - for detecting disease-causing
XX prions.
XX
XX Example 8, Fig 4, 37pp; English.
XX
XX A transgenic mouse has been developed which comprises a genome in which
XX both alleles of an endogenous PrP (prion protein) gene of the mouse are
XX ablated, the genome containing operatively inserted all exogenous non-
XX mouse PrP gene. The mouse is susceptible to infection with prions which
XX generally only infect a genetically diverse mammal due to the presence of
XX the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
XX symptoms of prion disease within 200 days or less after inoculation with
XX prions which generally only infect a genetically diverse mammal. Also
XX described in the present invention are: (A) a method of producing the
XX transgenic mouse; and (B) determining the presence of infectious prions
XX in a sample obtained from a bovine. The transgenic mouse is used to
XX detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
XX disease of humans caused by prions. The present sequence represents
XX bovine prion protein (BoPrP), from the present invention. (Updated on 25-
XX MAR-2003 to correct PF field.)
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 197; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 36
XX |||||
XX 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 209
XX
XX RESULT 11
XX ID AAW85902 standard; peptide; 263 AA.
XX AC AAW85902;
XX
XX 12-FEB-1999 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
XX Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
XX cosmetic; therapeutic; bovine.
XX
XX Bos sp.
XX
XX OS US5846533-A.
XX
XX 08-DEC-1998.
XX
XX 13-SEP-1996; 96US-00713939.
XX
XX 14-SEP-1995; 95US-00528104.

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XX
XX (REGC ) UNIV CALIFORNIA.
XX PA (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI; 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 43-44; 58pp; English.
XX
XX This represents a bovine prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesizing a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins, isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
XX and optionally analysing the phages to determine a nucleic acid sequence
XX encoding an amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 197; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 36
XX |||||
XX 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 209
XX
XX RESULT 12
XX ID AAG65854 standard; protein; 263 AA.
XX AC AAG65854;
XX
XX 11-FEB-2002 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnie; PrP-Sc;
XX scrapie; Gerstmann-Strausler-Scheinker disease.
XX
XX Bos sp.
XX
XX OS US6290954-B1.
XX
XX 18-SEP-2001.
XX
XX 06-MAR-1998; 98US-00036579.
XX
XX 14-SEP-1995; 95US-00528104.
XX PR 13-SEP-1996; 96US-00713939.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI; 2001-637939/73.
XX
XX Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
XX particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
XX Gerstmann-Strausler-Scheinker disease, by contacting the source with PrP-
XX Sc antibodies.

```


PS Disclosure; Fig 3; 58pp; English.

XX CC The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Sträussler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX SQ Sequence 263 AA;

XX CC

QY Query Match 100.0%; Score 197; DB 4; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 13

ID ABP51788 standard; protein; 263 AA.

XX AC ABP51788;

XX DT 03-OCT-2002 (first entry)

XX DE Bovine prion protein (PrP) SEQ ID NO:3.

XX KM Prion protein; PrP; scrapie; PrPSc; prion disease; immunoassay;

XX KM detection.

XX OS Bos sp.

XX PN US6372214-B1.

XX PD 16-APR-2002.

XX PF 13-APR-2000; 2000US-00550374.

XX PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PR 06-MAR-1998; 98US-00036579.

XX PA (REGC) UNIV CALIFORNIA

PA (SCRI) SCRIPPS RES INST.

XX PI Prusiner SB, Williamson RA, Burton DR;

XX DR WPI; 2002-433675/46.

XX PT Immunoassays for detecting scrapie isoforms of prion protein (PrPSc) and

PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

XX PT and testing pharmaceuticals for contamination.

XX PS Disclosure; Fig 3; 58pp; English.

XX CC The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterised by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e.

CC immunosays), for separating PrPSc proteins from biological samples

CC (i.e. immunoprecipitation) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX SQ Sequence 263 AA;

XX CC

QY Query Match 100.0%; Score 197; DB 5; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 14

ID ABUS8869 standard; protein; 263 AA.

XX AC ABUS8869;

XX DT 15-APR-2003 (first entry)

XX DE Bovine prion protein (PrP).

XX KM Prion protein; native prion protein; PrPSc; phage display library;

KM pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

KM scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

XX KM feline spongiform encephalopathy.

XX OS Bos sp.

XX PN US2002150571-A1.

XX PD 17-OCT-2002.

XX PF 30-AUG-2001; 2001US-00943906.

XX PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PR 06-MAR-1998; 98US-00036579.

PR 13-APR-2000; 2000US-00550374.

XX PA (PRUS/) PRUSINER S B.

PA (WILL/) WILLIAMSON R A.

PA (BURT/) BURTON D R.

XX PI Prusiner SB, Williamson RA, Burton DR;

XX DR WPI; 2003-198264/19.

XX PT Novel antibody that has the ability to specifically bind to native prion

PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

XX PT determining the cause of death of an animal, or in therapy.

XX PS Disclosure; Fig 3; 36pp; English.

XX CC The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesising a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

CC treating a material by adding to the material a sufficient amount of (1)
 CC to neutralise prpsc protein infectivity; in an assay to screen for the
 CC presence of prions (i.e. prpsc) in products such as pharmaceuticals, food
 CC or cosmetics, in prion neutralisation to purify a product, in extraction
 CC of prion proteins, and in therapy. (1) provides a fast, efficient and
 CC cost effective assay for detecting the presence of prpsc in a sample, and
 CC binds to a relatively high percentage of the infectious form of prpsc.
 CC This is the amino acid sequence of a prion protein used in the creation
 CC of an anti-prion protein-antibody

XX Sequence 263 AA;

Query Match 100.0%; Score 197; DB 6; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19; Mismatches 0; Gaps 0;

Matches 36; Conservative 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTNGENFT 36

174 RPVDQYSNONNFVHDCVNTVKEHTVTTTNGENFT 209

RESULT 15

AAE33228

ID AAE33228 standard; protein; 263 AA.

AC AAE33228;

DT 02-MAY-2003 (first entry)

DE Bovine Prp protein.

KW Bovine; pathogenic; prion protein; prpsc; Creutzfeldt-Jakob disease;

KW kuru; vaccine; neuroprotective; immunostimulant.

XX Bos sp.

XX MO200287502-A2.

XX 07-NOV-2002.

XX 25-APR-2002; 2002MO-US013346.

XX 01-MAY-2001; 2001US-0287971P.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Peretz D, Williamson RA, Burton DR;

XX WPI; 2003-140150/13.

XX Composition for clearing a disease conformation of a protein, especially

XX prpsc protein, and treating, e.g., Creutzfeldt-Jakob disease comprises

XX molecules, e.g., antibodies which bind and prevent conversion to disease

XX conformation.

XX Disclosure; Page 37-38; 38pp; English.

XX The invention relates to composition for clearing a disease conformation

XX of a protein, especially pathogenic prion protein (prpsc) from a cell.

XX The composition comprises molecules which bind a number of epitopes on a

XX first conformation of a protein, where the conversion to a second

XX conformation is prevented to allow a cell to clear protein in the second

XX conformation. The composition is useful for preventing or treating, e.g.,

XX kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The

XX present sequence is bovine prp protein

XX Sequence 263 AA;

Query Match 100.0%; Score 197; DB 6; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19; Mismatches 0; Gaps 0;

Matches 36; Conservative 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTNGENFT 36

DB 174 RPVDQYSNONNFVHDCVNTVKEHTVTTTNGENFT 209

Search completed: December 3, 2004, 00:55:43
 Job time: 60.6066 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: PIR:.*
2: pir2:.*
3: pir3:.*
4: pir4:.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	197	100.0	256	JU0268	major prion protei
2	197	100.0	264	A54330	major prion protei
3	194	98.5	256	S37149	prion protein - go
4	194	98.5	256	A54281	major prion protei
5	194	98.5	264	S37137	prion protein - gr
6	193	98.0	226	A53892	prion-related prot
7	193	98.0	239	S53633	major prion protei
8	193	98.0	241	S71048	major prion protei
9	193	98.0	241	S71056	major prion protei
10	193	98.0	245	S53627	major prion protei
11	193	98.0	245	S71045	major prion protei
12	193	98.0	252	S53631	major prion protei
13	193	98.0	253	S53624	major prion protei
14	193	98.0	253	S71041	major prion protei
15	193	98.0	253	S53620	major prion protei
16	193	98.0	253	S53625	major prion protei
17	193	98.0	253	S71055	major prion protei
18	193	98.0	253	S53616	major prion protei
19	193	98.0	253	S53618	major prion protei
20	193	98.0	253	S53619	major prion protei
21	193	98.0	253	A23544	major prion protei
22	193	98.0	253	A23544	major prion protei
23	192	97.5	260	S53629	major prion protei
24	191	97.0	257	JQ1900	major prion protei
25	190	96.4	252	S71041	major prion protei
26	190	96.4	252	S53634	major prion protei
27	190	96.4	253	S53614	major prion protei
28	190	96.4	253	I37032	major prion protei
29	190	96.4	254	UUHYIH	major prion Prp-Sc

30	190	96.4	254	2	B34759	prion protein - go
31	190	96.4	254	2	A34759	prion protein - Ch
32	190	96.4	257	2	A23545	major prion PrP27-
33	189	95.9	252	2	I61848	major prion protei
34	189	95.9	252	2	UC6175	prion protein - ra
35	187	94.9	253	1	UHU	major prion protei
36	185	93.9	253	2	S53617	major prion protei
37	185	93.9	253	2	S53635	major prion protei
38	185	93.9	253	2	I61847	major prion protei
39	185	93.9	253	2	UUCH	major prion protei
40	185	93.9	253	2	A37372	prion protein homo
41	185	93.9	253	2	A46280	prion protein - ch
42	185	93.9	253	2	H89873	hypothetical prote
43	185	93.9	253	2	S31811	flocculation prote
44	185	93.9	253	2	T29340	hypothetical prote
45	185	93.9	253	2	AE3522	Leu/Ile/Val-bindin

ALIGNMENTS

```
RESULT 1
JU0268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C/Accession: JU0268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A:Accession: JU0268
A:Molecule type: DNA
A:Residues: 1-256 <YOS>
A/Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:182-217/Disulfide bonds: #status predicted
F:184/200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 197; DB 2; Length 256;
Best local similarity 100.0%; Pred. No. 1.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 167 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 202

RESULT 2
A54330
major prion protein 1 precursor - bovine
N:Alternate names: prion protein, long variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C/Accession: A54330; JT0953; JT0952; A48551; S07347; I46931
R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A>Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C
A:Reference number: A54330; MUID:91116314; PMID:1671225
A:Accession: A54330
A:Molecule type: DNA
A:Residues: 1-264 <GOL>
A/Cross-references: UNIPROT:P10279; GB:X55882; NID:9683; PIDN:CA39368.1; PID:G684
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A:Accession: JT0953
A:Molecule type: DNA
A:Residues: 1-264 <YOS>
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A:Cross-references: GB:D10613; NID:g217595; PIDN:BA01468.1; PID:g217596
A:Accession: J00952
A:Molecule type: DNA
A:Residues: 1-217, K, 219-264 <Y02>
R:Yoshimoto, J.; Iihama, T.; Ishiguro, N.; Horuchi, M.; Imamura, M.; Shingawa, M.
Virus Genes 6, 343-356, 1992
A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
A:Reference number: A48551; MUID:93118243; PMID:1362024
A:Accession: A48551
A:Molecule type: mRNA
A:Residues: 1-217, K, 219-264 <Y03>
A:Cross-references: GB:AB001468; NID:g1888342; PIDN:BA19253.1; PID:g1888343
A:Experimental source: brain
A:Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:P.121621)
R:Hope, J.; Reekie, L.J.D.; Hunter, N.; Multhaup, G.; Beyreuther, K.; White, H.; Scott, N.
Nature 336, 390-392, 1988
A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
A:Reference number: S07347; MUID:89057222; PMID:2904126
A:Accession: S07347
A:Molecule type: protein
A:Residues: 25-36 <HOP>
R:Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J.
Infect. Dis. 167, 602-613, 1993
A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
A:Reference number: 146931; MUID:93179783; PMID:8440932
A:Accession: 146931
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-264 <PRU>
A:Cross-references: GB:S55629; NID:g266111; PIDN:AA25514.1; PID:g266112
C:Genetics:
A:Gene: PrP
C:Superfamily: major prion protein
C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domains: signal sequence #status predicted <SIG>
F:25-264/Product: major prion protein 1 #status predicted <MAT>
F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
F:190-225/Dismulfide bonds: #status predicted
F:192,208/Binding site: carbohydrate (Aam) (covalent) #status predicted
Query Match 100.0%; Score 197; DB 2; Length 264;
Best local similarity 100.0%; Pred. No. 1,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 210
RESULT 3
S37149
prion protein - goat
C:Species: Capra aegagrus hircus (domestic goat)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: S37149
R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
submitted to the EMBL Data Library, August 1993
A:Reference number: S37137
A:Accession: S37137
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-256 <MAR>
A:Cross-references: UNIPROT:P52113; EMBL:X74758; NID:g400442; PIDN:CAA52774.1; PID:g40044
C:Superfamily: major prion protein
Query Match 98.5%; Score 194; DB 2; Length 256;
Best local similarity 97.2%; Pred. No. 4.6e-18;
Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 167 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 202

RESULT 4
A54281
major prion protein - sheep
C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: A54281; A55983
R:McCauley, D.; Zulliani, V.; Cooper, C.M.; Da Costa, M.; Neuman, S.; Jenny, A.L.; Detwiler
Genes Dev. 8, 959-969, 1994
A:Title: Homozygosity for prion protein alleles encoding glutamine-171 renders sheep sus
A:Reference number: A54281; MUID:95011594; PMID:7926780
A:Accession: A54281
A:Molecule type: DNA
A:Residues: 1-256 <RES>
A:Cross-references: UNIPROT:Q46648; GB:X79912; NID:g510442; PIDN:CAA56283.1; PID:g1171580
R:Goldmann, W.; Hunter, N.; Foster, J.D.; Salbaum, J.M.; Beyreuther, K.; Hope, J.
Proc. Natl. Acad. Sci. U.S.A. 87, 2476-2480, 1990
A:Title: Two alleles of a neural protein gene linked to scrapie in sheep.
A:Reference number: A55983; MUID:90207218; PMID:1969635
A:Accession: A55983
A:Molecule type: DNA
A:Residues: 1-170, R, 172-256 <GOL>
A:Cross-references: GB:M1313; NID:g166039; PIDN:AA297765.1; PID:g166040
C:Superfamily: major prion protein

Query Match 98.5%; Score 194; DB 2; Length 256;
Best local similarity 97.2%; Pred. No. 4.6e-18;
Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 167 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 202
RESULT 5
S37137
prion protein - greater kudu
C:Species: Tragelaphus strepsiceros (greater kudu)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: S37137
R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
submitted to the EMBL Data Library, August 1993
A:Reference number: S37137
A:Accession: S37137
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-264 <MAR>
A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g39893
C:Superfamily: major prion protein
Query Match 98.5%; Score 194; DB 2; Length 264;
Best local similarity 97.2%; Pred. No. 4.7e-18;
Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 210
RESULT 6
A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Jiao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>

A:Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA1947.1; PID:g206392
C:Superfamily: major prion protein

Query Match 98.0%; Score 193; DB 2; Length 226;
Best Local Similarity 94.4%; Pred. No. 5.4e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 36
Db 136 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 171

RESULT 7

major prion protein - douroucouli (fragment)
C:Species: Aotus tigris (douroucouli, night monkey, owl monkey)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53633; S71042
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: UNIPROT:P40245; EMBL:U08293
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 239;
Best Local Similarity 94.4%; Pred. No. 5.7e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 36
Db 156 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 191

RESULT 8

major prion protein - Callicebus moloch (fragment)
C:Species: Callicebus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g475585
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 241;
Best Local Similarity 94.4%; Pred. No. 5.8e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 36
Db 157 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 192

RESULT 9

major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474364
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 241;
Best Local Similarity 94.4%; Pred. No. 5.8e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 36
Db 157 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 192

RESULT 10

major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 245;
Best Local Similarity 94.4%; Pred. No. 5.9e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 36
Db 156 RPYDQYSONNPFVHDCVNTVKEHTVTTTKGENFT 191

RESULT 11

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004C/Accession: S71045; S53628
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNAA/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474343; PIDN:AACS0081.1; PID:g4743R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53628
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 245;
Best Local Similarity 94.4%; Pred. No. 5, 9e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;QY 1 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 36
Db 156 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 191

RESULT 12

major prion protein - brown capuchin

C/Species: Cebus apella (brown capuchin, black-capped capuchin)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004C/Accession: S53631; S71044
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53631
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-252 <SCH>
A/Cross-references: UNIPROT:P40249; EMBL:U08295R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71044
A/Molecule type: DNA
A/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:g474348; PIDN:AACS0084.1; PID:g474349C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 252;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;QY 1 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 36
Db 163 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 198

RESULT 13

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003C/Accession: S53624; S53620
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995C/Accession: S53624; S71051
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53624
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08311R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71051
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:g475583; PIDN:AACS0099.1; PID:g475584

C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;QY 1 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 36
Db 164 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 199

RESULT 14

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003C/Accession: S53623; S71052
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53623
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08298R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71052
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:g474354; PIDN:AACS0087.1; PID:g474355

C/Suprafamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;QY 1 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 36
Db 164 RPVDYSNQNNFVHDCVNTTKEHTVTTTGGENFT 199

RESULT 15

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003C/Accession: S53620; S71058
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A;Title: Prion protein gene variation among primates.
 A;Reference number: S53614; MUID:95139066; PMID:7837269
 A;Accession: S53620
 A;Status: nucleic acid sequence not shown
 A;Molecule type: DNA
 A;Residues: 1-253 <SCH>
 A;Cross-references: EMBL:U08294
 R;Schatz1, H.M.
 submitted to the EMBL Data Library, April 1994
 A;Reference number: S71041
 A;Accession: S71058
 A;Molecule type: DNA
 A;Residues: 1-210,'E',212-253 <SCH>
 A;Cross-references: EMBL:U08294; NID:G474346; PIDN:AAC50083.1; PID:G474347
 C;Superfamily: major prion protein
 C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 94.4%; Pred. No. 6.1e-18;
 Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNIITVKSHVTTTKGENFT 36
 |||||
 Db 164 RPVDQYSNQNPFVHDCVNIITVKSHVTTTKGENFT 199
 |||||

Search completed: December 3, 2004, 00:38:43
 Job time : 11.8 secs

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Query Match 100.0%; Score 197; DB 2; Length 100;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 32 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 67

RESULT 3

097912 PRELIMINARY; PRT; 200 AA.

AC 097912;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prp;
 OS Bison bonasus (European bison).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bison.
 OC NCBI_Taxid=9902;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfer F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian Prp reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AF117328; AAD1999.1; -;
 DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR InterPro; IPR001610; PAC.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 6.
 DR SMART; SM00086; PAC; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER
 FT NON TER
 SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4B5271B CRC64;

Query Match 100.0%; Score 197; DB 2; Length 200;
 Best Local Similarity 100.0%; Pred. No. 1.7e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 132 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 167

RESULT 4

0616V2 PRELIMINARY; PRT; 211 AA.

AC 0616V2;
 DT 05-JUL-2004 (TREMBLrel. 27, Created)
 DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prp;
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_Taxid=9913;

RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RT "Cloning and sequencing of Prp mature protein gene of Chinese yellow
 cattle.";
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RL
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AY585239; AAT09128.1; -;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER
 FT NON TER
 FT CHAIN
 FT NON TER
 SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 1.8e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 144 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 179

RESULT 5

AAT09128 PRELIMINARY; PRT; 211 AA.

AC AAT09128;
 DT 20-MAY-2004 (TREMBLrel. 27, Created)
 DT 20-MAY-2004 (TREMBLrel. 27, Last sequence update)
 DT 20-MAY-2004 (TREMBLrel. 27, Last annotation update)
 DE Prion protein (Fragment).
 GN Prp.
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_Taxid=9913;

RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RT "Cloning and sequencing of Prp mature protein gene of Chinese yellow
 cattle.";
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RL
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 CC EMBL; AY585239; AAT09128.1; -;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER
 FT NON TER
 FT CHAIN
 FT NON TER
 SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 1.8e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36

Db 144 RPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFT 179

RESULT 6.

Q9TV00 PRELIMINARY; PRT; 216 AA.

AC Q9TV00; 01-MAY-2000 (TEMBLrel. 13, Created)

DT 01-MAY-2000 (TEMBLrel. 13, Last sequence update)

DE 01-JUN-2003 (TEMBLrel. 24, Last annotation update)

DE Prion protein (Fragment).

GN Name=Prp.

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=PBL;

RX MEDLINE=99303687; PubMed=10373359;

RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S., Schwarz T.F., Werner T., Schatzl H.M.;

RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation of flexible regions of the prion protein.";

RT J. Mol. Biol. 289:1163-1178(1999).

CC -1- SIMILARITY: Belongs to the prion family.

DR EMBL: AF117327; AAD19998.1; -

DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.

DR InterPro: IPR001610; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 6.

DR PRINTS: PR00341; Prion.

DR SMART: SM00086; PAC; 1.

DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Prion.

FT NON_TER 1 1

FT NON_TER 216 216

SQ SEQUENCE 216 AA; 23425 MW; BE6BECF479966730 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 216;

Best Local Similarity 100.0%; Pred. No. 1.8e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFT 36

Db 135 RPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFT 170

RESULT 7

PRP2_BOVIN STANDARD; PRT; 256 AA.

AC Q01880;

DT 01-JUN-1994 (Rel. 29, Created)

DT 01-JUN-1994 (Rel. 29, Last sequence update)

DT 29-MAR-2004 (Rel. 43, Last annotation update)

DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril protein 2).

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

RX MEDLINE=93118243; PubMed=1362024;

RX Yoshimoto J., Ihnuma T., Ishiguro N., Horiuchi M., Imamura M.,

RA Shinagawa M.;

RT "Comparative sequence analysis and expression of bovine Prp gene in mouse L-929 cells.";

RT Virus Genes 6:343-356(1992).

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Found in high quantity in the brain of humans and animals infected with degenerative neurological diseases such as kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), etc.

CC -1- transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

CC -----

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CC -----

DR EMBL: D10614; BAA01469.1; -

DR PIR: J00268; J00268.

DR HSSP: P10279; LDWY.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS: PR00341; Prion.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat; Signal.

FT SIGNAL 1 24

FT CHAIN 25 233

FT PROPEP 234 256

FT LIPID 233 233

FT CARBOHYD 184 184

FT CARBOHYD 200 200

FT DISULFID 182 217

FT DOMAIN 54 95

FT REPEAT 54 62

FT REPEAT 63 70

FT REPEAT 71 78

FT REPEAT 79 86

FT REPEAT 87 95

SQ SEQUENCE 256 AA; 27880 MW; OD969FP2D9033B30 CRC64;

Query Match 100.0%; Score 197; DB 1; Length 256;

Best Local Similarity 100.0%; Pred. No. 2.2e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFT 36

Db 167 RPVDQSNQNNFVHDCVNITVKEHTVTTTNGENFT 202

RESULT 8

PRIO_BOVIN STANDARD; PRT; 264 AA.

AC P10279;

DT 01-MAR-1989 (Rel. 10, Created)

DT 01-NOV-1991 (Rel. 20, Last sequence update)

DT 01-OCT-2004 (Rel. 45, Last annotation update)

DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril protein 1).

GN Name=Prnp; Synonyms=Prp;

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

CC Bovinae; Bos.
 CC NCBI_TaxId=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian;
 RA MEDLINE=9116314; PubMed=1671225;
 RX Goldmann W., Hunter N., Martin T., Dawson M., Hope J.,
 RT "different forms of the bovine PrP gene have five or six copies of a
 RT short, G-C-rich element within the protein-coding exon.",
 RL J. Gen. Virol. 72:201-204(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA MEDLINE=93118243; PubMed=1362024;
 RX Yoshimoto J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,
 RA Shinagawa M.,
 RT "Comparative sequence analysis and expression of bovine PrP gene in
 RT mouse L-929 cells.",
 RL Virus Genes 6:343-356(1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=93179783; PubMed=8440932;
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H., Taraboulos A.,
 RA Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.,
 RT "Immunologic and molecular biologic studies of prion proteins in
 RT bovine spongiform encephalopathy.",
 RL J. Infect. Dis. 167:602-613(1993).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian; TISSUE=Brain;
 RA Horiuchi M.,
 RT Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RA MEDLINE=2142303; PubMed=11531705;
 RX Hills D., Cominchi S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.,
 RT "Complete genomic sequence of the bovine prion gene (PrNP) and
 RT polymorphism in its promoter region.",
 RL Anim. Genet. 32:231-232(2001).
 RN [6]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.,
 RT "Nucleotide sequence of PrP cDNA in Korean cattle.",
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RP SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shinagawa M.,
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE OF 25-36.
 RA MEDLINE=89057122; PubMed=2904126;
 RX Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.,
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein.",
 RL Nature 336:390-392(1988).
 RN [9]
 RP STRUCTURE BY NMR OF 132-241.
 RA MEDLINE=20359707; PubMed=1089999;
 RX Lopez Garcia F., Zahn R., Riek R., Muehlich K.,
 RT "NMR structure of the bovine prion protein.",
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339(2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL; X55882; CAA39368.1; -;
 CC EMBL; D10612; BAA01467.1; -;
 CC EMBL; D10613; BAA01468.1; -;
 CC EMBL; S55629; AAB25514.1; -;
 CC EMBL; AB001466; BAA19253.1; -;
 CC EMBL; AJ298878; CAC37367.1; -;
 CC EMBL; AF517842; AAM66709.1; -;
 CC EMBL; D26151; BAA05138.1; -;
 CC PIR; A54330; A54330.
 CC PDB; IDWY; NMR; A=130-241.
 CC PDB; IDWZ; NMR; A=130-241.
 CC PDB; IDX0; NMR; A=23-241.
 CC PDB; IDX1; NMR; A=23-241.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion, octapep; 6.
 CC PRINTS; PR00341; PRION.
 CC PROSITE; PS00291; PRION 1.
 CC PROSITE; PS00706; PRION 2; 1.
 CC 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
 CC Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
 CC SIGNAL 1 24
 CC CHAIN 25 241
 CC PROPEP 242 264
 CC LIPID 241 241
 CC CARBOHYD 192 192
 CC CARBOHYD 208 208
 CC DISULFID 190 225
 CC DOMAIN 54 103
 CC FT REPEAT 54 62
 CC FT REPEAT 63 70
 CC FT REPEAT 71 78
 CC FT REPEAT 79 86
 CC FT REPEAT 87 94
 CC FT REPEAT 95 103
 CC FT VARIANT 71 78
 CC FT CONFLICT 136 138
 CC FT HELIX 140 141
 CC FT STRAND 140 141
 CC FT HELIX 155 162
 CC FT TURN 163 164
 CC FT HELIX 165 167
 CC FT STRAND 173 174
 CC FT HELIX 184 203
 CC FT TURN 204 206
 CC FT HELIX 211 237
 CC SQ SEQUENCE 264 AA; 28614 MW; D6D214036316A231 CRC64;
 CC -----
 CC Query Match 100.0%; Score 197; DB 1; Length 264;
 CC Beat Local Similarity 100.0%; Pred. No. 2, 3e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC -----
 CC Oy 1 RPPDQYSNQNFFVHDCVNIIVKVEHTVTTTGGENT 36
 CC |||||
 CC Db 175 RPPDQYSNQNFFVHDCVNIIVKVEHTVTTTGGENT 210
 CC |||||
 CC RESULT 9
 CC GUL03
 CC ID GUL03 PRELIMINARY; PRT; 264 AA.

```

AC 06UL03;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
EMBL: AY367643; AA064650.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion, 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP, 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB26EFD0E CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 36
DB 175 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 10
Q6UL04 PRELIMINARY; PRT; 264 AA.
ID Q6UL04;
AC Q6UL04;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
EMBL: AY367642; AA064649.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion, 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP, 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; F90214038316A101 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 36

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DB 175 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 11
Q6UL05 PRELIMINARY; PRT; 264 AA.
ID Q6UL05;
AC Q6UL05;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
EMBL: AY367640; AA064647.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion, 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP, 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 36
DB 175 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 12
Q6UL06 PRELIMINARY; PRT; 264 AA.
ID Q6UL06;
AC Q6UL06;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
EMBL: AY367639; AA064646.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion, 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP, 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.

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SQ  SEQUENCE 264 AA; 28584 MW; D06747B5374541D0 CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPVDQYSGNNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSGNNNFVHDCVNITVKEHTVTTTGGENFT 210
RESULT 13
Q6UL07 PRELIMINARY; PRT; 264 AA.
AC Q6UL07;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 01-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=30521;
GN [1]
PE SEQUENCE FROM N.A.
RA Yang J., Zhao D., Li N.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367637; AAC64644.1; -
DR EMBL; AY327450; AAC93321.1; -
DR EMBL; AY367636; AAC64643.1; -
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octaped; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPVDQYSGNNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSGNNNFVHDCVNITVKEHTVTTTGGENFT 210
RESULT 14
Q6UL09 PRELIMINARY; PRT; 264 AA.
AC Q6UL09;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=30521;
GN [1]
PE SEQUENCE FROM N.A.

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RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.,
RL Submitted (Aug-2003) to the EMBL/Genbank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367635; AAC64642.1; -.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; 1A909F038304293C CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. NO.2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTNGENFT 36
Db 175 RPVDQYSNQNPFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 15
Q7YRN3 PRELIMINARY; PRT; 264 AA.
ID Q7YRN3
AC Q7YRN3;
DT 01-OCT-2003 (TrEMBLrel. 25. Created)
DT 01-OCT-2003 (TrEMBLrel. 25; last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26; last annotation update)
DE Prion protein precursor PrP.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovine; Bos
NCBI_TaxID=9913;
[1]
RN SEQUENCE FROM N.A.
RP
RX PubMed=14722726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keale J.W., Snelling W.M., Fox J.M., Chitko-Mckown C.G.,
RA Laegreid W.W.;
RT "Prion gene sequence variation within diverse groups of U.S. sheep,
RT beef cattle, and deer."
RL Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY35912; AAP84097.1; -.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR001610; PAC.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR SMART; SM00086; PAC; 1.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion; Signal.
FT SIGNAL 1 24 Potential.
SQ SEQUENCE 264 AA; 28660 MW; F28D533C47205BFS CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. NO.2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTNGENFT 36
Db 175 RPVDQYSNQNPFVHDCVNITVKEHTVTTTNGENFT 210

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Job time : 58.1902 secs

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Fri Dec 3 10:54:03 2004

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GenCore version 5.1.6
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OM protein - protein search, using sw model

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(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYSNONRFVHDCVNTVKEHTVTTTKGENFT 36

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Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
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3: /cgn2_6/prodata/1/iaa/6A_COMB.pep.*
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5: /cgn2_6/prodata/1/iaa/PCUTUS_COMB.pep.*
6: /cgn2_6/prodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	197	100.0	219	4 US-09-380-015B-2	Sequence 2, Appl
2	197	100.0	263	1 US-08-242-188-3	Sequence 3, Appl
3	197	100.0	263	1 US-08-509-261A-3	Sequence 3, Appl
4	197	100.0	263	1 US-08-660-626-9	Sequence 9, Appl
5	197	100.0	263	1 US-08-692-892-3	Sequence 3, Appl
6	197	100.0	263	2 US-08-713-939A-3	Sequence 3, Appl
7	197	100.0	263	2 US-08-868-162A-23	Sequence 23, Appl
8	197	100.0	263	3 US-09-031-168-9	Sequence 9, Appl
9	197	100.0	263	3 US-09-036-579-3	Sequence 3, Appl
10	197	100.0	263	3 US-09-550-374-3	Sequence 3, Appl
11	197	100.0	263	4 US-09-943-906-3	Sequence 3, Appl
12	197	100.0	263	4 US-09-669-516C-9	Sequence 9, Appl
13	197	100.0	264	4 US-09-128-450-21	Sequence 21, Appl
14	197	100.0	264	3 US-09-823-494-21	Sequence 21, Appl
15	197	100.0	264	4 US-09-451-867-24	Sequence 24, Appl
16	197	100.0	264	4 US-09-627-218B-11	Sequence 11, Appl
17	194	98.5	255	1 US-08-242-188-4	Sequence 4, Appl
18	194	98.5	255	1 US-08-509-261A-4	Sequence 4, Appl
19	194	98.5	255	1 US-08-660-626-10	Sequence 10, Appl
20	194	98.5	255	1 US-08-692-892-4	Sequence 4, Appl
21	194	98.5	255	2 US-08-713-939A-4	Sequence 4, Appl
22	194	98.5	255	2 US-08-868-162A-24	Sequence 24, Appl
23	194	98.5	255	3 US-09-031-168-10	Sequence 10, Appl
24	194	98.5	255	3 US-09-036-579-4	Sequence 4, Appl
25	194	98.5	255	3 US-09-550-374-4	Sequence 4, Appl
26	194	98.5	255	4 US-09-943-906-4	Sequence 4, Appl
27	194	98.5	255	4 US-09-669-516C-10	Sequence 10, Appl

28	194	98.5	256	4 US-09-431-887-25	Sequence 25, Appl
29	194	98.5	256	4 US-09-431-887-28	Sequence 28, Appl
30	194	98.5	264	4 US-09-431-887-27	Sequence 27, Appl
31	193	98.0	245	4 US-09-431-887-5	Sequence 5, Appl
32	193	98.0	245	4 US-09-431-887-15	Sequence 15, Appl
33	193	98.0	252	4 US-09-431-887-17	Sequence 17, Appl
34	193	98.0	253	4 US-09-431-887-3	Sequence 3, Appl
35	193	98.0	253	4 US-09-431-887-7	Sequence 7, Appl
36	193	98.0	253	4 US-09-431-887-9	Sequence 9, Appl
37	193	98.0	253	4 US-09-431-887-10	Sequence 10, Appl
38	193	98.0	253	4 US-09-431-887-11	Sequence 11, Appl
39	193	98.0	253	4 US-09-431-887-12	Sequence 12, Appl
40	193	98.0	253	4 US-09-431-887-14	Sequence 14, Appl
41	193	98.0	253	4 US-09-431-887-16	Sequence 16, Appl
42	193	98.0	253	4 US-09-431-887-18	Sequence 18, Appl
43	193	98.0	254	1 US-08-242-188-1	Sequence 1, Appl
44	193	98.0	254	1 US-08-509-261A-1	Sequence 1, Appl
45	193	98.0	254	1 US-08-660-626-7	Sequence 7, Appl

ALIGNMENTS

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RESULT 1
; Sequence 2, Application US/09380015B
; Patent No. 6765088
;
; GENERAL INFORMATION:
; APPLICANT: Carsten Korth
; TITLE OF INVENTION: Immunological Detection of prions
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Kanton Zuerich vertreten durch die Erziehungsdirektion
; STREET: Walchetur
; CITY: Zuerich
; STATE: Zuerich
; COUNTRY: Switzerland
; ZIP: CH-8090
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/380,015B
; FILING DATE: 23-Aug-1999
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 97102837.8
; FILING DATE: 21-FEB-1997
;
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 219 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Bos taurus
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2

Query Match 100.0%; Score 197; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 1,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONRFVHDCVNTVKEHTVTTTKGENFT 36
DB 152 RPVDQYSNONRFVHDCVNTVKEHTVTTTKGENFT 187

RESULT 2

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US-08-242-188-3
Sequence 3, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicovic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicovic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrp
US-08-242-188-3

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 209

RESULT 3
US-08-509-261A-3
Sequence 3, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Pastero for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-3

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 209

RESULT 4
US-08-660-626-9
Sequence 9, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: ERITROPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valela Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 5:
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3

Query Match 100.0%; Score 197; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 596269
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 197; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Teiling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSES: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSES: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 10
US-09-550-374-3
Sequence 3, Application US/09550374
Patent No. 6372214
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/550,374
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/036,579
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-550-374-3

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 11
US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. 6562341
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 197; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 12
US-09-669-516C-9
Sequence 9, Application US/09669516C
Patent No. 6602672
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn C.
APPLICANT: Cohen, Fred E.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: RECOMBINANT CONSTRUCT ENCODING EPIPTOPE
TITLE OF INVENTION: TAGGED PrP PROTEIN
FILE REFERENCE: UCAL-045CON
CURRENT APPLICATION NUMBER: US/09/669,516C
CURRENT FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/031,168
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 08/660,626
PRIOR FILING DATE: 1996-06-06
PRIOR APPLICATION NUMBER: 08/521,992
PRIOR FILING DATE: 1995-08-31
PRIOR APPLICATION NUMBER: 08/509,261
PRIOR FILING DATE: 1995-07-31
PRIOR APPLICATION NUMBER: 08/242,188
PRIOR FILING DATE: 1994-05-13
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9
LENGTH: 263
TYPE: PrP

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 197; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 36
DB 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 209

RESULT 13
US-09-128-450-21
Sequence 21, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 197; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 36
DB 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 210

RESULT 14
US-09-823-494-21
Sequence 21, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 197; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 36

DB 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 210

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 197; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 36
DB 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTGTGENT 210

Search completed: December 3, 2004, 00:18:59
Job time : 13.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYNSQNNFVHDCVNTTKVHTVTTTKGENFT 36

Scoring table: BL0SUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

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- 3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB.pep.*
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- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	197	100.0	117	14	US-10-050-902-349
2	197	100.0	117	14	US-10-050-902-349
3	197	100.0	117	14	US-10-050-902-349
4	197	100.0	117	14	US-10-346-190-90
5	197	100.0	161	9	US-09-745-003-9
6	197	100.0	256	13	US-10-109-551-2
7	197	100.0	256	16	US-10-479-218-3
8	197	100.0	263	9	US-09-943-906-3
9	197	100.0	263	14	US-10-435-602-3
10	197	100.0	264	9	US-09-823-494-21
11	197	100.0	264	14	US-10-209-194-2
12	197	100.0	264	14	US-10-355-780-11
13	197	100.0	264	14	US-10-304-630-24

14	197	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	197	100.0	264	14	US-10-410-907A-13	Sequence 13, Appl
16	197	100.0	264	14	US-10-346-190-80	Sequence 80, Appl
17	197	100.0	264	14	US-10-417-968A-19	Sequence 19, Appl
18	197	100.0	264	15	US-10-301-448-30	Sequence 30, Appl
19	197	100.0	264	15	US-10-301-448-33	Sequence 33, Appl
20	197	100.0	264	16	US-10-479-218-2	Sequence 2, Appl
21	194	98.5	255	9	US-09-943-906-4	Sequence 4, Appl
22	194	98.5	255	14	US-10-435-602-4	Sequence 4, Appl
23	194	98.5	256	13	US-10-109-551-4	Sequence 25, Appl
24	194	98.5	256	14	US-10-304-630-25	Sequence 28, Appl
25	194	98.5	256	14	US-10-304-630-28	Sequence 12, Appl
26	194	98.5	256	14	US-10-410-907A-12	Sequence 81, Appl
27	194	98.5	256	14	US-10-346-190-81	Sequence 81, Appl
28	194	98.5	256	14	US-10-346-190-88	Sequence 88, Appl
29	194	98.5	256	16	US-10-479-218-1	Sequence 1, Appl
30	194	98.5	256	16	US-10-479-218-4	Sequence 4, Appl
31	194	98.5	256	16	US-10-479-218-5	Sequence 5, Appl
32	194	98.5	256	16	US-10-479-218-6	Sequence 6, Appl
33	194	98.5	256	16	US-10-479-218-7	Sequence 7, Appl
34	194	98.5	256	16	US-10-479-218-8	Sequence 8, Appl
35	194	98.5	256	16	US-10-479-218-9	Sequence 9, Appl
36	194	98.5	256	16	US-10-479-218-10	Sequence 10, Appl
37	194	98.5	256	16	US-10-479-218-11	Sequence 11, Appl
38	194	98.5	256	16	US-10-479-218-12	Sequence 12, Appl
39	194	98.5	256	16	US-10-479-218-13	Sequence 13, Appl
40	194	98.5	256	16	US-10-479-218-14	Sequence 14, Appl
41	194	98.5	256	16	US-10-479-218-18	Sequence 18, Appl
42	194	98.5	256	16	US-10-479-218-19	Sequence 19, Appl
43	194	98.5	256	16	US-10-479-218-20	Sequence 20, Appl
44	194	98.5	254	14	US-10-304-630-27	Sequence 27, Appl
45	193	98.0	124	14	US-10-050-902-324	Sequence 324, App

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesse, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentln Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 2

US-10-050-898-349
Sequence 349, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisroc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seddel, Peter
APPLICANT: Plosssek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staudenfeld, Matthias
APPLICANT: Frey, Peter

TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898

PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 349
LENGTH: 117

TYPE: PRT
ORGANISM: Artificial sequence

FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment

US-10-050-898-349

Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 3

US-10-346-190-90
Sequence 90, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:

APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates

FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190

PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166

PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902

PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164

SOFTWARE: Patentin version 3.1
SEQ ID NO 90

LENGTH: 117
TYPE: PRT

ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Bovine Prion Protein Fragment

US-10-346-190-90

Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 4

US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003

PRIOR FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 9

LENGTH: 161
TYPE: PRT

ORGANISM: bovine
US-09-745-003-9

Query Match 100.0%; Score 197; DB 9; Length 161;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 36
Db 72 RPVDQSNQNNFVHDCVNITVKEHTVTTTGGENFT 107

RESULT 5

US-10-109-551-2
Sequence 2, Application US/10109551
Publication No. US20020194635A1
GENERAL INFORMATION:

APPLICANT: DUNNE, PATRICK W.
APPLICANT: PIEDRAHITA, JORGE
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
SPONGIFORM ENCEPHALOPATHIES

FILE REFERENCE: TANK:207US
CURRENT APPLICATION NUMBER: US/10/109,551

PRIOR FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: 60/280,549

PRIOR FILING DATE: 2001-03-30
NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2

LENGTH: 256
TYPE: PRT

ORGANISM: Bos taurus
US-10-109-551-2

Query Match 100.0%; Score 197; DB 13; Length 256;

Best Local Similarity 100.0%; Pred. No. 3.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 167 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 202

RESULT 6

US-10-479-218-3
Sequence 3, Application US/10479218
Publication No. US20040171082A1

GENERAL INFORMATION:
APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)

APPLICANT: Jeffrey, Martin
TITLE OF INVENTION: Diagnostic method

FILE REFERENCE: CG/P/135/MOD
CURRENT APPLICATION NUMBER: US/10/479,218

CURRENT FILING DATE: 2003-12-01
PRIOR APPLICATION NUMBER: GB 0113156.4

PRIOR FILING DATE: 2001-05-31
NUMBER OF SEQ ID NOS: 20

SOFTWARE: Patent version 3.1
SEQ ID NO 3

LENGTH: 256
TYPE: PRT

ORGANISM: Ovis aries
US-10-479-218-3

Query Match 100.0%; Score 197; DB 16; Length 256;
Best Local Similarity 100.0%; Pred. No. 3.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 167 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 202

RESULT 7

US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. US20020150571A1

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road

CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.

ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Query Match 100.0%; Score 197; DB 9; Length 263;
Best Local Similarity 100.0%; Pred. No. 3.9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 174 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 209

RESULT 8

US-10-435-602-3
Sequence 3, Application US/10435602
Publication No. US20030228303A1

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: Antibodies Specific for Native PrP^{Sc}
FILE REFERENCE: UCAL059CON3

CURRENT APPLICATION NUMBER: US/10/435,602
CURRENT FILING DATE: 2003-05-09

PRIOR APPLICATION NUMBER: 09/943,906
PRIOR FILING DATE: 2001-08-30

PRIOR APPLICATION NUMBER: 09/550,374
PRIOR FILING DATE: 2000-04-13

PRIOR APPLICATION NUMBER: 09/036,579
PRIOR FILING DATE: 1998-03-06

PRIOR APPLICATION NUMBER: 08/713,939
PRIOR FILING DATE: 1996-09-13

PRIOR APPLICATION NUMBER: 08/528,104
PRIOR FILING DATE: 1995-09-14

NUMBER OF SEQ ID NOS: 86
SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3
LENGTH: 263

TYPE: PRT
ORGANISM: bovine
US-10-435-602-3

Query Match 100.0%; Score 197; DB 14; Length 263;
Best Local Similarity 100.0%; Pred. No. 3.9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 174 RPYDQYNNNNFVHDCNITVKEHTVTTTGGENFT 209

RESULT 9

US-09-823-494-21
Sequence 21, Application US/09823494
Publication No. US20010041790A1

GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
Applicant: Caughey, Byron W

APPLICANT: Chabry, Joelle
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121

CURRENT APPLICATION NUMBER: US/09/823,494

```
/ CURRENT FILING DATE: 2001-03-30
/ PRIOR APPLICATION NUMBER: 09/128,450
/ PRIOR FILING DATE: 1998-08-03
/ NUMBER OF SEQ ID NOS: 29
/ SOFTWARE: Patent In Ver. 2.0
/ SEQ ID NO: 21
/ LENGTH: 264
/ TYPE: PRT
/ ORGANISM: Bos taurus
/ US-09-823-494-21

Query Match      100.0%; Score 197; DB 9; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 10
US-10-209-194-2
/ Sequence 2, Application US/10209194
/ Publication No. US20030051264A1
/ GENERAL INFORMATION:
/ APPLICANT: LILIEDAHL, MONIKA
/ APPLICANT: ASPLAND, SIMON ERIC
/ TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
/ TITLE OF INVENTION: SUSCEPTIBILITY TO MAD COW DISEASE
/ FILE REFERENCE: BIOBANK.007A
/ CURRENT FILING DATE: 2002-07-29
/ PRIOR APPLICATION NUMBER: 60/309,222
/ PRIOR FILING DATE: 2001-07-31
/ PRIOR APPLICATION NUMBER: 60/367,091
/ PRIOR FILING DATE: 2002-03-21
/ NUMBER OF SEQ ID NOS: 15
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO: 24
/ LENGTH: 264
/ TYPE: PRT
/ ORGANISM: Bos Taurus
/ US-10-209-194-2

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 11
US-10-355-780-11
/ Sequence 11, Application US/10355780
/ Publication No. US20030143224A1
/ GENERAL INFORMATION:
/ APPLICANT: Prusiner, Stanley
/ APPLICANT: Safar, Jiri
/ APPLICANT: Williamson, Anthony
/ APPLICANT: Burton, Dennis
/ TITLE OF INVENTION: Antipodies Specific for Ungulate Prp
/ FILE REFERENCE: UCAL-194
/ CURRENT FILING DATE: 2003-01-30
/ PRIOR APPLICATION NUMBER: US/09/627,218B
/ PRIOR FILING DATE: 2000-07-27
/ NUMBER OF SEQ ID NOS: 11
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO: 11
/ LENGTH: 264
/ TYPE: PRT
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/ ORGANISM: Bos taurus
/ US-10-355-780-11

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 174 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 209

RESULT 12
US-10-304-630-24
/ Sequence 24, Application US/10304630
/ Publication No. US20030161836A1
/ GENERAL INFORMATION:
/ APPLICANT: D-Gen Limited
/ TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
/ TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
/ FILE REFERENCE: ICOT/P21952
/ CURRENT FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: US/09/431,887
/ PRIOR FILING DATE: 1999-11-02
/ PRIOR APPLICATION NUMBER: GB 9824091.4
/ PRIOR FILING DATE: 1999-11-04
/ NUMBER OF SEQ ID NOS: 37
/ SOFTWARE: Patent In Ver. 2.0
/ SEQ ID NO: 24
/ LENGTH: 264
/ TYPE: PRT
/ ORGANISM: Bos taurus
/ US-10-304-630-24

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPYDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 13
US-10-301-488A-30
/ Sequence 30, Application US/10301488A
/ Publication No. US20030166558A1
/ GENERAL INFORMATION:
/ APPLICANT: FRANGIONE, Blas
/ APPLICANT: WISNIEWSKI, Thomas
/ APPLICANT: SIGURDSSON, Einar
/ TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
/ TITLE OF INVENTION: SYNTHETIC HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN, AN
/ TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
/ TITLE OF INVENTION: IMMUNE RESPONSE THEREFO
/ FILE REFERENCE: 5986/1K434US1
/ CURRENT FILING DATE: 2002-11-21
/ PRIOR APPLICATION NUMBER: US/10/301,488A
/ PRIOR FILING DATE: 2001-11-21
/ NUMBER OF SEQ ID NOS: 55
/ SOFTWARE: Patent In version 3.1
/ SEQ ID NO: 30
/ LENGTH: 264
/ TYPE: PRT
/ ORGANISM: Cow
/ US-10-301-488A-30

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 36
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 210

RESULT 14
 US-10-301-488A-33

; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Bias
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGUIDSSON, Einar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr,
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

Query Match 100.0%; Score 197; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 3.9e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 36
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 210

RESULT 15
 US-10-410-907A-13

; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: PasteSeq for Windows Version 4.0
 ; SEQ ID NO 13

; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus (bovine)
 ; US-10-410-907A-13

Query Match 100.0%; Score 197; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 3.9e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 36
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTNGENFT 210

Search completed: December 3, 2004, 01:07:49
 Job time: 43.6098 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Sequence: 1 RPVDQYSNQNFVHDCVNTKEHYVTTTKGSENFTEIDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	117	5	ABG94358 Modified
2	217	100.0	117	5	ABG80670 Bovine pr
3	217	100.0	117	7	ADD24197 Modified
4	217	100.0	217	3	AAB07317 Cattle pr
5	217	100.0	217	3	AAB07328 Cattle pr
6	217	100.0	219	2	AAW70261 Bovine pr
7	217	100.0	219	2	AAW93571 Bovine pr
8	217	100.0	256	6	ABP57900 Bovine BS
9	217	100.0	263	2	AAW86716 Bovine pr
10	217	100.0	263	2	AAW86961 Bovine pr
11	217	100.0	263	4	AAW85902 Bovine pr
12	217	100.0	263	4	AAW85854 Bovine pr
13	217	100.0	263	6	ABP51788 Bovine pr
14	217	100.0	263	6	ABU58869 Bovine pr
15	217	100.0	263	6	AAE33228 Bovine pr
16	217	100.0	263	8	ADK15534 Bovine pr
17	217	100.0	264	2	AAV07995 Bovine pr
18	217	100.0	264	4	AAW86176 Bovine pr
19	217	100.0	264	4	AAW82113 Bovine pr
20	217	100.0	264	5	ABW04424 Bovine pr
21	217	100.0	264	5	AAE15604 Bovine pr
22	217	100.0	264	6	ABU07876 Bovine pr
23	217	100.0	264	6	AAE36754 Bovine pr
24	217	100.0	264	6	ABP55139 Bovine pr
25	217	100.0	264	6	ABR42798 Bovine pr

ALIGNMENTS

25	217	100.0	264	6	ABR42801	Abi42801 Cattle pr
27	217	100.0	264	7	ADD24187	Adi24187 Bovine pr
28	217	100.0	264	7	ADP86886	Adp86886 Bovine pr
29	217	100.0	264	7	ADP06743	Adp06743 Bovine pr
30	217	100.0	264	8	ADH44555	Adh44555 Bovine pr
31	217	100.0	264	8	ADK15535	Adk15535 Bovine pr
32	217	100.0	264	8	ADL15208	Adl15208 Bovine pr
33	217	100.0	265	5	AAW50889	Aaw50889 Bovine pr
34	216	99.5	264	4	AAW72361	Aaw72361 Cow prion
35	214	98.6	255	2	AAW86717	Aaw86717 Sheep pr
36	214	98.6	255	2	AAW69662	Aaw69662 Sheep pr
37	214	98.6	255	2	AAW85903	Aaw85903 Sheep pr
38	214	98.6	255	4	AAW65855	Aaw65855 Ovine pr
39	214	98.6	255	5	ABP51789	Abp51789 Ovine pr
40	214	98.6	255	6	ABU58870	Abu58870 Sheep pr
41	214	98.6	255	6	AAE33229	Aae33229 Ovine pr
42	214	98.6	255	8	ADK15536	Adk15536 Ovine pr
43	214	98.6	256	4	AAW72362	Aaw72362 Sheep pr
44	214	98.6	256	4	AAW72365	Aaw72365 Goat pr
45	214	98.6	256	4	AAW8572	Aaw8572 Oryx demm

RESULT 1
ABG94358 standard; protein, 117 AA.

ABG94358:

06-AUG-2003 (revised)
10-DEC-2002 (first entry)

Modified bovine prion protein fragment.

Human, mouse, rat; antimicrobial; antiallergic; immunomodulatory; cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array; vaccine; infectious disease.

Bos taurus.

W0200256905-A2.

25-JUL-2002.

21-JAN-2002; 2002MO-IB000166.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-0326998P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Seibel P; Ploesek C;

WPI; 2002-627351/67.

Disclosure; Page 441; 441pp; English.

This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an oligomer comprising at least one first attachment site, where the oligomer is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment

site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant beta coat proteins having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, used in antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a protein sequence used to create the compositions of the invention. (Updated on 06 -AUG-2003 to correct OS field.)

CC Sequence 117 AA;

Query Match 100.0%; Score 217; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 7.4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGTGENTETDI 40
43 RPVDQYSNONNFVHDCVNTVKEHTVTTTGTGENTETDI 82

ABG80670 standard; protein; 117 AA.

ABG80670;

29-NOV-2002 (first entry)

Bovine prion protein/cysteine-containing peptide fusion protein.

Molecular antigen array; vaccine; antigen; antimicrobial; mutant; molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant; graft versus host disease; IGE-mediated allergic reaction; anaphylaxis; adult respiratory distress syndrome; ARDS; Crohn's disease; allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma; Grave's disease; systemic lupus erythematosus; osteoporosis; inflammatory immune disease; myasthenia gravis; multiple sclerosis; immunoproliferative disease lymphadenopathy; Alzheimer's disease; immunoproliferative lymphadenopathy; immunoblastic lymphadenopathy; rheumatoid arthritis; diabetes; infectious disease; factor Xa; enterokinase; cysteine-containing linker.

Bos taurus.
Synthetic.

MO200256907-A2.

25-JUN-2002.

21-JAN-2002; 2002WO-1B000168.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-0326989P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

(NOVS) NOVARTIS PHARMA AG.

(MAUR) MAURER P.

(LECH) LECHNER F.

(ORTM) ORTMANN R.

(LUBO) LUBOEND R.

(STAU) STAUENBIEL M.

(FREY) FREY P.

PI Maurer P, Lechner F, Ortman R, Luboend R, Staufenbiel M, Frey P;
PI Renner WA, Bachmann M, Tisot A, Seibel P, Plosek C;
DR WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious diseases.

PS Disclosure; Page 418; 418pp; English.

The invention relates to a composition comprising: (a) a non-natural molecular scaffold comprising: (i) a core particle selected from: (1) a core particle of a non-natural origin; and (2) a core particle of natural origin; and (ii) an antigen comprising at least one first attachment site, where the antigen is connected to the core particle by at least one covalent bond; (b) an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta 1-42) or its fragment, and where the second attachment site is selected from: (i) an attachment site not naturally occurring with the antigen or antigenic determinant; and (ii) an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a modified antigen for use in the array of the invention. The antigen is modified to possess a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N- or C-terminal linker peptide which serves as the attachment point to a virus like particle or bacterial protein (the scaffold protein).

Sequence 117 AA;

Query Match 100.0%; Score 217; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 7.4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGTGENTETDI 40
43 RPVDQYSNONNFVHDCVNTVKEHTVTTTGTGENTETDI 82

ADD24197 standard; protein; 117 AA.

ADD24197;

15-JUN-2004 (first entry)

Modified bovine prion protein amino acid sequence.

vaccine composition; virus-like particle; core particle;

first attachment site; antigen; antigenic determinant; prion protein;

PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

Creutzfeldt-Jakob Disease; prion.

Synthetic.

prion.

PN WO2003059386-A2.
 XX 24-JUL-2003.
 XX 17-JAN-2003; 2003WO-EP000460.
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 XX 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS Disclosure; SEQ ID NO 90; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC bovine prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 CC
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 217; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.4e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDI 40
 Db 43 RPVDQYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDI 82
 XX
 RESULT 4
 AAB07317
 ID AAB07317 standard; protein; 217 AA.
 XX
 AC AAB07317;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KW Cattle; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FT Region 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond repeat unit: PHGGGWGQ (AAB07319)"
 FT 166..201
 FT Modified-site 217
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX

PN WO200029850-A1.
 XX 25-MAY-2000.
 XX 27-OCT-1999; 99WO-FI000897.
 XX 17-NOV-1998; 98FI-00002481.
 PR
 XX (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX WPI; 2000-387880/33.
 XX
 PT Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates BSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 CC
 XX Sequence 217 AA;
 SQ
 Query Match 100.0%; Score 217; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDI 40
 Db 151 RPVDQYSNQNPFVHDCVNIIVKEHTVTTTGGNFETDI 180
 XX
 RESULT 5
 AAB07328
 ID AAB07328 standard; protein; 217 AA.
 XX
 AC AAB07328;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KW Cattle; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FT Region 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond repeat unit: PHGGGWGQ (AAB07319)"
 FT 166..201
 FT Modified-site 217
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029849-A1.
 XX 25-MAY-2000.
 XX

PF 27-OCT-1999; 99WO-F1000896.
 XX 17-NOV-1998; 98RI-00002480.
 XX (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX Hope J, Barnard GJR, Birkett CR;
 PI WPI, 2000-399778/34.
 XX
 DR New immunosay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-807336) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;

Query Match 100.0%; Score 217; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETFDI 40
 DB 151 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETFDI 190

RESULT 6
 ID AAW70261 standard; protein; 219 AA.
 XX AAW70261;
 AC AAW70261;
 XX 13-NOV-1998 (first entry)
 DT 13-NOV-1998 (first entry)
 XX
 DE Bovine prion protein.
 XX
 KW Prion protein; Prp; cow; disease-specific prion protein; scrapie; Kuru;
 KM prion disease detection; bovine spongiform encephalopathy; therapy;
 KM Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KM Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 XX
 PN EP861900-A1.
 PD 02-SEP-1998.
 XX
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ER21-) ERZIEHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korzh C, Stierli B, Moser M, Streite P, Oesch B;
 XX WPI; 1998-449112/39.
 DR N-PSDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine, spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 PS Disclosure; Page 20-21; 35pp; English.
 XX

CC This sequence represents the bovine prion protein (Prp). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrpC) and disease-specific prion protein (PrpSc) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific Prp in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 217; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETFDI 40
 DB 152 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETFDI 191

RESULT 7
 ID AAW93571 standard; protein; 219 AA.
 XX AAW93571;
 AC AAW93571;
 XX 17-JUN-1999 (first entry)
 DT 17-JUN-1999 (first entry)
 XX
 DE Bovine rBPrP protein.
 XX
 KW Prion protein; Prp; rBPrP; disease specific isoform; PrP(Sc); vaccine;
 KM treatment; diagnosis; scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KM detection.
 XX
 OS Bos taurus.
 XX
 PN DE19741607-A1.
 PD 25-MAR-1999.
 XX
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 XX
 PI Moser M, Oesch B, Korzh C;
 XX WPI; 1999-205964/18.
 DR
 XX
 PT New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" Prp (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of Prp, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
CC for diagnosis of scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The
CC polypeptides are also useful in pharmaceutical or chemical libraries for
CC detection of PrP(Sc)-specific agents

XX
SQ Sequence 219 AA;

Query Match 100.0%; Score 217; DB 2; Length 219;
Best Local Similarity 100.0%; Pred. No. 1.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 152 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 191

RESULT 8
ABP57900
ID ABP57900 standard; protein; 256 AA.
XX
AC ABP57900;

XX 12-FBB-2003 (first entry)

XX Bovine BSE-resistant prion protein.

XX Transmissible spongiform encephalopathy; neuroprotective; prion protein;
KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;
KM TSE.
XX
KM Bos taurus.

XX W0200279416-A2.

XX 10-OCT-2002.

XX 28-MAR-2002; 2002WO-US009652.

XX 30-MAR-2001; 2001US-0280549P.

XX (TEXA) UNIV TEXAS A & M SYSTEM.

XX Dunne PW, Piedrahita J;

XX WPI: 2003-092895/08.

XX N-PSDB; ABV99701.

XX New transgenic bovine and cervid useful for producing animals which are
PT resistant to bovine spongiform encephalopathy and transmissible
PT spongiform encephalopathy disease, comprise a transgene encoding a mutant
PT PrP polypeptide.

XX Claim 1; Fig 6; 98pp; English.

XX The invention relates to a novel transgenic bovine/cervid comprising a
XX transgene encoding a mutant prion protein (PrP) polypeptide, in which a
XX substitution has been made at position 171 of the sequence, which renders
XX the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and
XX transmissible spongiform encephalopathy (TSE) disease, respectively. The
XX transgene of the invention has neuroprotective activity. The method is
XX useful for producing a transgenic bovine or cervid resistant to BSE and
XX TSE diseases. The bovine prion gene is useful for producing transgenic
XX cattle exhibiting resistance to bovine spongiform encephalopathy. The
XX sequence represents the mutant bovine PrP polypeptide

XX Sequence 256 AA;

Query Match 100.0%; Score 217; DB 6; Length 256;
Best Local Similarity 100.0%; Pred. No. 1.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 167 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 9
AAR86716
ID AAR86716 standard; protein; 263 AA.
XX
AC AAR86716;

XX 15-OCT-1996 (first entry)

XX Bovine prion protein, BoPrP.

XX Chimeric gene; chimeric prion; transgenic animal; diagnosis;
KM spongiform encephalopathy; PrP; central nervous system; CNS;
KM Creutzfeldt-Jacob disease; CJD; BSE.
XX
XX Bos taurus.

XX W09531466-A1.

XX 23-NOV-1995.

XX 10-APR-1995; 95WO-US004426.

XX 13-MAY-1994; 94US-00242188.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Scott MR, Telling G;

XX WPI: 1996-010868/01.

XX Chimeric prion protein gene - for formation of a transgenic animal
PT susceptible to prion infection by prion(s) normally specific for a
PT different species.

XX Disclosure; Page 42-43; 65pp; English.

XX Pathogenic prions in a sample can be detected by injecting the sample to
CC be tested into a transgenic mouse. The mouse genome includes a chimeric
CC PrP gene in which the gene includes a portion of a gene of the animal
CC (e.g. cattle) in danger of infection from prions in the sample. Preferred
CC transgenic mice express a chimeric prion protein (PrP) in which a segment
CC of the mouse PrP, MoPrP, is replaced with the corresponding bovine PrP
CC sequence

XX Sequence 263 AA;

Query Match 100.0%; Score 217; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 10
AAW69661
ID AAW69661 standard; protein; 263 AA.
XX
AC AAW69661;

XX 25-MAR-2003 (revised)

XX 19-OCT-1998 (first entry)

XX Bovine prion protein BoPrP.

XX Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.
XX

```

OS Bos sp.
XX
XX US5792901-A.
XX
XX 11-AUG-1998.
XX
XX 30-JUL-1996; 96US-00692892.
XX
XX 13-MAY-1994; 94US-00242188.
XX 31-JUL-1995; 95US-00509261.
XX 31-AUG-1995; 95US-00521992.
XX
XX (REBC ) UNIV CALIFORNIA.
XX
XX Scott MR, Telling GC, Prusiner SB;
XX WPI, 1998-456207/39.
XX
XX Transgenic mouse with altered PrP gene - for detecting disease-causing
XX prions.
XX
XX Example 8; Fig 4; 37pp; English.
XX
XX A transgenic mouse has been developed which comprises a genome in which
XX both alleles of an endogenous PrP (prion protein) gene of the mouse are
XX ablated, the genome containing operatively inserted all exogenous non-
XX mouse PrP gene. The mouse is susceptible to infection with prions which
XX generally only infect a genetically diverse mammal due to the presence of
XX the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
XX symptoms of prion disease within 200 days or less after inoculation with
XX prions which generally only infect a genetically diverse mammal. Also
XX described in the present invention are: (A) a method of producing the
XX transgenic mouse; and (B) determining the presence of infectious prions
XX in a sample obtained from a bovine. The transgenic mouse is used to
XX detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
XX disease of humans caused by prions. The present sequence represents
XX bovine prion protein (BoPrP) from the present invention. (Updated on 25-
XX MAR-2003 to correct PF field.)
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 217; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 1.9e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYNNQNFVHDCVNITVKEHTVTTTGGNFETTDI 40
XX |||||
XX 174 RPVDQYNNQNFVHDCVNITVKEHTVTTTGGNFETTDI 213
XX
XX RESULT 11
XX AAM85902
XX ID AAM85902 standard; peptide, 263 AA.
XX
XX AAM85902;
XX
XX 12-FEB-1999 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
XX Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
XX cosmetic; therapeutic; bovine.
XX
XX Bos sp.
XX
XX US5846533-A.
XX
XX 08-DEC-1998.
XX
XX 13-SEP-1996; 96US-00713939.
XX
XX 14-SEP-1995; 95US-00528104.
XX

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XX
XX (REBC ) UNIV CALIFORNIA.
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX WPI, 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 43-44; 58pp; English.
XX
XX This represents a bovine prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesizing a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins, isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
XX and optionally analysing the phages to determine a nucleic acid sequence
XX encoding an amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 217; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 1.9e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYNNQNFVHDCVNITVKEHTVTTTGGNFETTDI 40
XX |||||
XX 174 RPVDQYNNQNFVHDCVNITVKEHTVTTTGGNFETTDI 213
XX
XX RESULT 12
XX AAG65854
XX ID AAG65854 standard; protein, 263 AA.
XX
XX AAG65854;
XX
XX 11-FEB-2002 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnia; PrP-Sc;
XX scrapie; Gerstmann-Strassler-Scheinker disease.
XX
XX Bos sp.
XX
XX US6290954-B1.
XX
XX 18-SEP-2001.
XX
XX 06-MAR-1998; 98US-00036579.
XX
XX 14-SEP-1995; 95US-00528104.
XX 13-SEP-1996; 96US-00713939.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX WPI, 2001-637939/73.
XX
XX Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
XX particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
XX Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
XX Sc antibodies.
XX

```

PS Disclosure; Fig 3; 58pp; English.

XX The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Strassler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX

XX Sequence 263 AA;

SO

Query Match 100.0%; Score 217; DB 4; Length 263;

Best Local Similarity 100.0%; Pred. No. 1.9e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 13

ABP51788

ID ABP51788 standard; protein; 263 AA.

XX

XX ABP51788;

AC

XX 03-OCT-2002 (first entry)

DT

XX

XX Bovine prion protein (PrP) SEQ ID NO:3.

DE

XX Prion protein; PrP; scrapie; PrPSc; prion disease; immunoassay;

KW

XX detection.

KM

XX

XX Bos sp.

OS

XX

XX US6372214-B1.

PN

XX

XX 16-APR-2002.

PD

XX

XX 13-APR-2000; 2000US-00550374.

PF

XX

XX 14-SEP-1995; 95US-00528104.

PR

XX 13-SEP-1996; 96US-00713939.

PR

XX 06-MAR-1998; 98US-00036579.

XX

XX (REGC) UNIV CALIFORNIA.

PA

XX (SCRI) SCRIPPS RES INST.

PA

XX

XX Prusiner SB, Williamson RA, Burton DR;

PI

XX

XX WPI; 2002-433675/46.

DR

XX

XX Immunassays for detecting scrapie isoforms of prion protein (PrPSc) and

PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

PT and testing pharmaceuticals for contamination.

PT

XX

XX Disclosure; Fig 3; 58pp; English.

PS

XX

XX The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterized by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e. scrapie

CC immunassays), for separating PrPSc proteins from biological samples

CC (i.e. immunoprecipitation) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX

XX Sequence 263 AA;

SO

Query Match 100.0%; Score 217; DB 5; Length 263;

Best Local Similarity 100.0%; Pred. No. 1.9e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 14

ABUS8869

ID ABUS8869 standard; protein; 263 AA.

XX

XX ABUS8869;

AC

XX 15-APR-2003 (first entry)

DT

XX

XX Bovine prion protein (PrP).

DE

XX Prion protein; native prion protein; PrPSc; phage display library;

KW pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

KW scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

KM feline spongiform encephalopathy.

KM

XX

XX Bos sp.

OS

XX

XX US2002150571-A1.

PN

XX

XX 17-OCT-2002.

PD

XX

XX 30-AUG-2001; 2001US-00943906.

PF

XX

XX 14-SEP-1995; 95US-00528104.

PR

XX 13-SEP-1996; 96US-00713939.

PR

XX 06-MAR-1998; 98US-00036579.

PR

XX 13-APR-2000; 2000US-00550374.

XX

XX (PRUS/) PRUSINER S B.

PA (WTL/) WILLIAMSON R A.

PA (BURT/) BURTON D R.

PA

XX

XX Prusiner SB, Williamson RA, Burton DR;

PI

XX

XX WPI; 2003-198264/19.

DR

XX

XX Novel antibody that has the ability to specifically bind to native prion

PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

PT determining the cause of death of an animal, or in therapy.

PT

XX

XX Disclosure; Fig 3; 36pp; English.

PS

XX

XX The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesizing a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

treating a material by adding to the material a sufficient amount of (1) to neutralise PrP^{Sc} protein infectivity; in an assay to screen for the presence of prions (1.e. PrP^{Sc}) in products such as pharmaceuticals, food or cosmetics, in prion neutralisation to purify a product, in extraction of prion proteins, and in therapy. (1) provides a fast, efficient and cost effective assay for detecting the presence of PrP^{Sc} in a sample, and binds to a relatively high percentage of the infectious form of PrP^{Sc}. This is the amino acid sequence of a prion protein used in the creation of an anti-prion protein-antibody

Sequence 263 AA;

Query Match 100.0%; Score 217; DB 6; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHTVTTTGGNFETDI 40
174 RPVDQYNNNNFVHDCVNIIVKHTVTTTGGNFETDI 213

RESULT 15

AAE33228 ID AAE33228 standard; protein; 263 AA.

AAE33228;

02-MAY-2003 (first entry)

Bovine PrP protein.

Bovine; pathogenic; prion protein; PrP^{Sc}; Creutzfeldt-Jakob disease;

Kuru; vaccine; neuroprotective; immunostimulant.

Bos sp.

MO200287502-A2.

07-NOV-2002.

25-APR-2002; 2002MO-US013346.

01-MAY-2001; 2001US-0287971P.

(REGC) UNIV CALIFORNIA.

Prusiner SB, Peretz D, Williamson RA, Burton DR;

WPI; 2003-140150/13.

Composition for clearing a disease conformation of a protein, especially PrP^{Sc} protein, and treating, e.g., Creutzfeldt-Jakob disease comprises molecules, e.g., antibodies which bind and prevent conversion to disease conformation.

Disclosure; Page 37-38; 38pp; English.

The invention relates to composition for clearing a disease conformation of a protein, especially pathogenic prion protein (PrP^{Sc}) from a cell. The composition comprises molecules which bind a number of epitopes on a first conformation of a protein, where the conversion to a second conformation is prevented to allow a cell to clear protein in the second conformation. The composition is useful for preventing or treating, e.g., kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The present sequence is bovine PrP protein

Sequence 263 AA;

Query Match 100.0%; Score 217; DB 6; Length 263;

Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHTVTTTGGNFETDI 40

DB 174 RPVDQYNNNNFVHDCVNIIVKHTVTTTGGNFETDI 213

Search completed: December 3, 2004, 00:55:42
Job time : 66.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Sequence: 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:**
1: pir1:**
2: pir2:**
3: pir3:**
4: pir4:**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	256	2	JU0268 major prion protei
2	217	100.0	264	2	A54330 major prion protei
3	214	98.6	256	2	S37149 prion protein - go
4	214	98.6	256	2	A54281 major prion protei
5	214	98.6	264	2	S37137 prion protein - gr
6	212	97.7	226	2	A53892 prion-related prot
7	212	97.7	239	2	S53633 major prion protei
8	212	97.7	241	2	S71048 major prion protei
9	212	97.7	241	2	S71056 major prion protei
10	212	97.7	245	2	S53627 major prion protei
11	212	97.7	245	2	S71045 major prion protei
12	212	97.7	252	2	S53631 major prion protei
13	212	97.7	253	2	S53624 major prion protei
14	212	97.7	253	2	S53620 major prion protei
15	212	97.7	253	2	S53623 major prion protei
16	212	97.7	253	2	S53625 major prion protei
17	212	97.7	253	2	S53623 major prion protei
18	212	97.7	253	2	S71055 major prion protei
19	212	97.7	253	2	S53616 major prion protei
20	212	97.7	253	2	S53618 major prion protei
21	212	97.7	253	2	S53619 major prion protei
22	212	97.7	254	2	A23544 major prion protei
23	211	97.2	260	2	S53629 major prion protei
24	210	96.8	254	1	UHYH1H major prion prp-Sc
25	210	96.8	257	2	A23545 major prion prp27-
26	209	96.3	232	2	S71041 major prion protei
27	209	96.3	252	2	S53634 major prion protei
28	209	96.3	252	2	UC6175 prion protein - ra
29	209	96.3	253	2	S53614 major prion protei

30	209	96.3	253	2	I37032 major prion protei
31	209	96.3	254	2	B34759 prion protein - go
32	209	96.3	254	2	A34759 prion protein - ch
33	208	95.9	252	2	I61848 major prion protei
34	208	95.9	257	2	J01900 major prion protei
35	206	94.9	253	1	UJHU major prion protei
36	204	94.0	253	2	S53617 major prion protei
37	204	94.0	253	2	S53635 prion protein - st
38	204	94.0	253	2	I61847 major prion protei
39	59	27.2	139	2	H90004 hypothetical prote
40	58.5	27.0	267	2	A37372 prion protein homo
41	58	26.7	346	2	B71496 tryptophan-tRNA 11
42	57.5	26.5	267	1	UUCH major prion protei
43	57.5	26.5	273	2	A46280 prion protein - ch
44	57	26.3	423	2	E97165 flagellar hook pro
45	56	25.8	384	2	H89873 hypothetical prote

ALIGNMENTS

```

RESULT 1
JU0268
major prion protein 2 precursor - bovine
N;Alternate names: prion protein, short variant; Prp protein
C;Species: Bos primigenius taurus (cattle)
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C;Accession: JU0268
R;Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A;Reference number: JT0952
A;Accession: JU0268
A;Molecule type: DNA
A;Residues: 1-256 <YOS>
A;Cross-references: UNIPROT:Q01880
C;Superfamily: major prion protein
C;Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F;1-24/Domain: signal sequence #status predicted <SIG>
F;25-256/Product: major prion protein 2 #status predicted <MAT>
F;60-91/Region: 8-residue repeats
F;182-217/Disulfide bonds: #status predicted
F;184,200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match      100.0%; Score 217; DB 2; Length 256;
Best Local Similarity 100.0%; Pred. No. 6.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDI 40
Db      167 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETEDI 206

RESULT 2
A54330
major prion protein 1 precursor - bovine
N;Alternate names: prion protein, long variant; Prp protein
C;Species: Bos primigenius taurus (cattle)
C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C;Accession: A54330; JT0953; A48551; S07347; I46931
R;Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A;Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C
A;Reference number: A54330; MUID:9116314; PMID:1671225
A;Accession: A54330
A;Molecule type: DNA
A;Residues: 1-264 <GOL>
A;Cross-references: UNIPROT:P10279; GB:X55882; NID:9683; PIDN:CA9368.1; PID:9684
R;Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A;Reference number: JT0952
A;Accession: JT0952
A;Molecule type: DNA
A;Residues: 1-264 <YOS>

```

A3.Cross-references: GB:DI0613; NID:G217595; PIDN:BAA01468.1; PID:G217596
 A.Accession: J70952
 A.Molecule type: DNA
 A.Residues: 1-217, 'K', 219-264 <Y02>
 R.Yoshimoto, Y.; Ihnuna, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
 Virtus Genes 6, 343-356, 1992
 A.Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
 A.Reference number: A48551; MUID:93118243; PMID:1362024
 A.Accession: A48551
 A.Molecule type: mRNA
 A.Residues: 1-217, 'K', 219-264 <Y03>
 A.Cross-references: GB:AB001468; NID:G1888342; PIDN:BAA19253.1; PID:G1888343
 A.Experimental source: brain
 A.Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:121621)
 R.Hope, J.; Reelie, L.J.D.; Hunter, N.; Maltchup, G.; Beyreuther, K.; White, H.; Scott,
 Nature 336, 390-392, 1988
 A.Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A.Reference number: S07347; MUID:89057122; PMID:2904126
 A.Accession: S07347
 A.Molecule type: protein
 A.Residues: 25-36 <HOP>
 R.Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel,
 U. Infect. Dis. 167, 602-613, 1993
 A.Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
 A.Reference number: I46931; MUID:93179783; PMID:8440932
 A.Accession: I46931
 A.Status: preliminary; translated from GB/EMBL/DBJ
 A.Molecule type: mRNA
 A.Residues: 1-264 <PRU>
 A.Cross-references: GB:IS5629; NID:G266111; PIDN:AAB25514.1; PID:G266112
 A.Genetics: PrP
 C.Superfamily: major prion protein
 C.Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>
 F:25-264/Product: major prion protein 1 #status predicted <MAT>
 F:60-99/Region: 8-residue repeats (W-Q-P-H-G-G)
 F:190-225/Diulfide bonds: #status predicted
 F:192-208/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 100.0%; Score 217; DB 2; Length 264;
 Best Local Similarity 100.0%; Pred. No. 6.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 40
 DB 175 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 214

RESULT 3
 S37149
 C.Species: Capra aegagrus hircus (domestic goat)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: S37149
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A.Reference number: S37137
 A.Accession: S37137
 A.Status: preliminary
 A.Molecule type: DNA
 A.Residues: 1-256 <MAR>
 A.Cross-references: UNIPROT:P52113; EMBL:X74758; NID:G400442; PIDN:CAA52774.1; PID:G4004
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 256;
 Best Local Similarity 97.5%; Pred. No. 1.5e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 40
 DB 167 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 206

RESULT 4
 A54281
 major prion protein - sheep
 C.Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: A54281; A35983
 R.Westaway, D.; Zuliani, V.; Cooper, C.M.; Da Costa, M.; Neuman, S.; Jenny, A.L.; Detwile
 Genes Dev. 8, 959-969, 1994
 A.Title: Homozygosity for prion protein alleles encoding glutamine-171 renders sheep susc
 A.Reference number: A54281; MUID:95011594; PMID:7926780
 A.Accession: A54281
 A.Molecule type: DNA
 A.Residues: 1-256 <WES>
 A.Cross-references: UNIPROT:O46648; GB:X79912; NID:G510442; PIDN:CAA56283.1; PID:G117158
 R.Goldmann, W.; Hunter, N.; Foster, J.D.; Saldaña, J.M.; Beyreuther, K.; Hope, J.
 Proc. Natl. Acad. Sci. U.S.A. 87, 2476-2480, 1990
 A.Title: Two alleles of a neutral protein gene linked to scrapie in sheep.
 A.Reference number: A35983; MUID:90207218; PMID:1969635
 A.Accession: A35983
 A.Molecule type: DNA
 A.Residues: 1-170, 'R', 172-256 <GOL>
 A.Cross-references: GB:M3133; NID:G166039; PIDN:AAB97765.1; PID:G166040
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 256;
 Best Local Similarity 97.5%; Pred. No. 1.5e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 40
 DB 167 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 206

RESULT 5
 S37137
 prion protein - greater kudu
 C.Species: Tragelaphus streptaceros (greater kudu)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: S37137
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A.Reference number: S37137
 A.Accession: S37137
 A.Status: preliminary
 A.Molecule type: DNA
 A.Residues: 1-264 <MAR>
 A.Cross-references: UNIPROT:P40242; EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G39893
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 264;
 Best Local Similarity 97.5%; Pred. No. 1.6e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 40
 DB 175 RPVDQYSNQNNFVHDCVNIITVKEHTVTTTGGENTETDI 214

RESULT 6
 A53892
 prion-related protein - rat (fragment)
 C.Species: Rattus norvegicus (Norway rat)
 C.Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
 C.Accession: A53892
 R.Liao, Y.C.; Tokes, Z.; Lhm, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
 Lab. Invest. 57, 370-374, 1987
 A.Title: Cloning of rat "prion-related protein" cDNA.
 A.Reference number: A53892; MUID:88037055; PMID:2889848
 A.Accession: A53892
 A.Status: preliminary
 A.Molecule type: mRNA
 A.Residues: 1-226 <LIA>

A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA1947.1; PID:G206392
C:Superfamily: major prion protein

Query Match 97.7%; Score 212; DB 2; Length 226;
Best Local Similarity 92.5%; Pred. No. 2.4e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 40
DB 136 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 175

RESULT 7

major prion protein - douroucouli (fragment)
C:Species: *Actus trivirgatus* (douroucouli, night monkey, owl monkey)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53633; S71042
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: UNIPROT:P40245; EMBL:U08293
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:G474344; PIDN:AAC50082.1; PID:G474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 239;
Best Local Similarity 92.5%; Pred. No. 2.5e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 40
DB 156 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 195

RESULT 8

major prion protein - *Callicebus moloch* (fragment)
C:Species: *Callicebus moloch*
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G475585
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 241;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;

Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 40
DB 157 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 196

RESULT 9

major prion protein - mandrill (fragment)
C:Species: *Papio sphinx*, *Mandrillus sphinx* (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G474364
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 241;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 40
DB 157 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 196

RESULT 10

major prion protein - green monkey
C:Species: *Cercopithecus aethiops* (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 245;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 40
DB 156 RPVDQYNNQNFVHDCVNTITVKHETVTTTGGKGFETDI 195

RESULT 11

S71045
major prion protein - Cercopithecus dianaC:Species: Cercopithecus diana
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71045; S53628

R:Schaezel, H.M.

A:Reference number: S71041
submitted to the EMBL Data Library, April 1994

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g4743

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', '12-202', 'R', '204-239' <SCW>

A:Cross-references: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 97.7%; Score 212; DB 2; Length 245;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDI 40

DB 156 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDV 195

RESULT 12

S53631
major prion protein - brown capuchin

C:Species: Cebus apella (brown capuchin, black-capped capuchin)

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C:Accession: S53631; S71044

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53631

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-252 <SCH>

A:Cross-references: UNIPROT:P40249; EMBL:U08295

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71044

A:Molecule type: DNA

A:Residues: 1-209, 'E', '211-252' <SCW>

A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 97.7%; Score 212; DB 2; Length 252;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDI 40

DB 163 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDV 202

RESULT 13

S53624
major prion protein - stump-tailed macaque

C:Species: Macaca arctoides (stump-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53624; S71052

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

C:Species: Macaca arctoides (stump-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53624; S71051

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53624

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08311

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71051

A:Molecule type: DNA

A:Residues: 1-210, 'E', '212-253' <SCW>

A:Cross-references: EMBL:U08311; NID:g475583; PIDN:AAC50099.1; PID:g475584

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 97.7%; Score 212; DB 2; Length 253;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDI 40

DB 164 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDV 203

RESULT 14

S53623
major prion protein - crab-eating macaque

C:Species: Macaca fascicularis (crab-eating macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53623; S71052

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53623

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08298

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71052

A:Molecule type: DNA

A:Residues: 1-210, 'E', '212-253' <SCW>

A:Cross-references: EMBL:U08298; NID:g474354; PIDN:AAC50087.1; PID:g474355

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 97.7%; Score 212; DB 2; Length 253;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDI 40

DB 164 RPVDQYSONNPFVHDCVNTTKVKEHTVTTTGGNFETDV 203

RESULT 15

S53620
major prion protein - hamadryas baboon

C:Species: Papio hamadryas (hamadryas baboon)

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53620; S71058

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Piron protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7637269
A:Accession: S53620
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08294
R:Scharzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71058
A:Molecule type: DNA
A:Residues: 1-210, 'E', 212-253 <SCW>
A:Cross-references: EMBL:U08294; NID:g474346; P1DN:AA050083.1; P1D:g474347
A:Superfamily: major piron protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; piron; scrapie

Query Match 97.7%; Score 212; DB 2; Length 253;
Best Local Similarity 92.5%; Pred. No. 2, 'e'-19;
Matches 377; Conservative 3; Mismatches 0; Indels 0; Gaps

	Query Match	97.7%	Score 212;	DB 2;	Length 253;
	Best Local Similarity	92.5%	Pred. No. 2.7e-19;		
	Matches	37;	Conservative	3;	Mismatches 0;
					Indels 0;
Gy	1	RPVVDGNNNNFVHDCVNITKHEHTVTTTTGGENFTETDI	40		
D6	164	RPVDDISQNNNFVHDCVNITKTHRTVTITTKGENFTETIDV	203		

```
Search completed: December 3, 2004, 00:38:42
Job time : 12 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Perfect score: 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	97	2	Q6EIP9 bos taurus
2	217	100.0	100	2	Q6EIQ2 bos taurus
3	217	100.0	200	2	O97912 bison bonas
4	217	100.0	211	2	O6J6V2 bos taurus
5	217	100.0	211	2	AAT09128 bos taurus
6	217	100.0	216	2	O9TV00 bos taurus
7	217	100.0	256	1	PRP2_BOVIN
8	217	100.0	264	2	PRI0_BOVIN
9	217	100.0	264	2	O6UL03 bos taurus
10	217	100.0	264	2	O6UL04 bos taurus
11	217	100.0	264	2	O6UL05 bos taurus
12	217	100.0	264	2	O6UL06 bos taurus
13	217	100.0	264	2	O6UL07 bos taurus
14	217	100.0	264	2	O6UL09 bos taurus
15	217	100.0	264	2	O7YRN3 bos taurus
16	217	100.0	264	2	O6A4M0 bos taurus
17	217	100.0	264	2	Q6EH52 alluropoda
18	217	100.0	264	2	AAQ64642 bos mutus
19	217	100.0	264	2	AAQ64643 bos mutus
20	217	100.0	264	2	AAQ64644 bos mutus
21	217	100.0	264	2	AAQ64645 bos tauru
22	217	100.0	264	2	AAQ64646 bos tauru
23	217	100.0	264	2	AAQ64647 bos tauru
24	217	100.0	264	2	AAQ64648 bos tauru
25	217	100.0	264	2	AAQ64649 bos tauru
26	217	100.0	264	2	AAQ64650 bos tauru
27	217	100.0	272	2	O8MJ17 bos taurus
28	214	98.6	181	2	O97911 budorcas ca
29	214	98.6	195	2	O97903 addax nasom
30	214	98.6	202	2	O97908 capra nubia
31	214	98.6	223	2	O97910 hippocragus

32	214	98.6	226	2	O97907	O97907 gazella sub
33	214	98.6	227	2	O97909	O97909 tragelaphus
34	214	98.6	246	2	O866W9	O866W9 cynocephalus
35	214	98.6	256	1	PRI0_BUDTA	O95M08 budorcas ta
36	214	98.6	256	1	PRI0_CAPI1	P52113 capra hircu
37	214	98.6	256	1	PRI0_OVICA	O7JH03 ovis canade
38	214	98.6	256	1	PRI0_OVIMU	O7JK02 ovis orient
39	214	98.6	256	1	PRP2_TRAST	P40243 tragelaphus
40	214	98.6	256	2	O46648	O46648 capra hircu
41	214	98.6	256	2	O6V638	O6V638 ovis aries
42	214	98.6	256	2	O6V654	O6V654 ovis aries
43	214	98.6	256	2	O70K29	O70K29 ovis aries
44	214	98.6	256	2	O712V9	O712V9 ovis aries
45	214	98.6	256	2	O712W0	O712W0 ovis aries

ALIGNMENTS

```

RESULT 1
ID Q6EIP9 PRELIMINARY; PRT; 97 AA.
AC Q6EIP9;
DT 01-OCT-2004 (TREMBLrel. 28, Created)
DT 01-OCT-2004 (TREMBLrel. 28, last sequence update)
DT 01-OCT-2004 (TREMBLrel. 28, last annotation update)
DE Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY320374; AAQ94050.1; -.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 97 AA; 11714 MW; 24C8DC7072FE98CE CRC64;

Query Match 100.0%; Score 217; DB 2; Length 97;
Best Local Similarity 100.0%; Pred. No. 1.4e-20; Indels 0; Gaps 0;
Matches 40; Conservative 0; Mismatches 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDI 40
DB 28 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDI 67

RESULT 2
ID Q6EIQ2 PRELIMINARY; PRT; 100 AA.
AC Q6EIQ2;
DT 01-OCT-2004 (TREMBLrel. 28, Created)
DT 01-OCT-2004 (TREMBLrel. 28, last sequence update)
DT 01-OCT-2004 (TREMBLrel. 28, last annotation update)
DE Prion protein (Fragment).
OC Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RA Zhang L., Li N., Fan B.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY320371; AAQ94047.1; -.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 100 AA; 12065 MW; 4AF40583CB5B4169 CRC64;

```

Query Match 100.0%; Score 217; DB 2; Length 100;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 |||
 32 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 71

RESULT 3
 ID 097912 PRELIMINARY; PRT; 200 AA.
 AC 097912; (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
 DT Prion protein (Fragment).
 GN Name:Prp;
 OS Bison bonasus (European bison).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bison.
 OC NCBI_TaxID=9902;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Pbl;
 RX MEDLINE=9903687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.,
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 RT of flexible regions of the prion protein."
 RT J. Mol. Biol. 289:1163-1178(1999).
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL: AF11328; AAD1999.1; -
 DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR Interpro: IPR001610; PAC.
 DR Interpro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion_octapep; 6.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER 1
 FT NON TER 200
 SO SEQUENCE 200 AA; 21674 MW; 1F270CDF4B5E271B CRC64;

Query Match 100.0%; Score 217; DB 2; Length 200;
 Best Local Similarity 100.0%; Pred. No. 3.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 |||
 122 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 171

RESULT 4
 ID 06J6V2 PRELIMINARY; PRT; 211 AA.
 AC 06J6V2; (TREMBlrel. 27, Created)
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
 DT Prion protein (Fragment).
 GN Name:Prp; (Bovine).
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;

RP [1]
 RP SEQUENCE FROM N.A.
 RP STRAIN-Chinese yellow cattle; TISSUE=Blood;
 RC Wang Z., Wang C., Wu X.;
 RA "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle.";
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RP STRAIN-Chinese yellow cattle; TISSUE=Blood;
 RC Wang Z., Wang C., Wu X.;
 RA Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL: AY585239; AAT09128.1; -
 DR Interpro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion_octapep; 5.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER 1
 FT NON TER 1
 FT CHAIN <1 >211 PrPc protein.
 FT NON TER 211
 SO SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 3.3e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 |||
 144 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 183

RESULT 5
 ID AAT09128 PRELIMINARY; PRT; 211 AA.
 AC AAT09128; (TREMBlrel. 27, Created)
 DT 20-MAY-2004 (TREMBlrel. 27, Last sequence update)
 DT 20-MAY-2004 (TREMBlrel. 27, Last sequence update)
 DT 20-MAY-2004 (TREMBlrel. 27, Last annotation update)
 DT Prion protein (Fragment).
 DE Prion.
 GN Prp; (Bovine).
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RP STRAIN-Chinese yellow cattle; TISSUE=Blood;
 RC Wang Z., Wang C., Wu X.;
 RA "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle.";
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RP STRAIN-Chinese yellow cattle; TISSUE=Blood;
 RC Wang Z., Wang C., Wu X.;
 RA Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY585239; AAT09128.1; -
 DR Prion.
 KW NON TER 1
 FT NON TER 1
 FT CHAIN <1 >211 PrPc protein.
 FT NON TER 211
 SO SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 3.3e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 |||

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Db      144 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGKGFETDI 183
|||||
RESULT 6
O9TV00 PRELIMINARY; PRT; 216 AA.
ID      O9TV00
AC      O9TV00
DT      01-MAY-2000 (TREMELREL. 13, Created)
DT      01-MAY-2000 (TREMELREL. 13, Last sequence update)
DE      01-JUN-2003 (TREMELREL. 24, Last annotation update)
DE      Prion protein (Fragment).
GN      Name=PrP.
OS      Bos taurus (Bovine).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC      Bovinae; Bos.
OX      NCBI_TaxID=9913;
RN      [1]
RP      SEQUENCE FROM N.A.
RC      TISSUE=PBL;
RA      MEDLINE=990303687; PubMed=10373359;
RA      Wopfner F., Weidenhofer G., Schneider R., von Bruun A., Gilch S.,
RA      Schwarz T.F., Werner T., Schatzl H.M.;
RT      Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT      of flexible regions of the prion protein."
RL      J. Mol. Biol. 289:1163-1178(1999).
CC      -1- SIMILARITY: Belongs to the prion family.
CC      EMBL: AF117327; AD1998.1; -.
CC      DR GO: GO:0006355; P:signal transduction; IEA.
CC      DR GO: GO:0007165; P:signal transduction; IEA.
CC      DR InterPro: IPR001610; Prion.
CC      DR Pfam: PF00377; Prion.
CC      DR Pfam: PF00391; Prion octapep; 6.
CC      DR PRINTS: PR00341; PRION.
CC      DR SMART: SM00086; PAC; 1.
CC      DR SMART: SM00157; PrP; 1.
CC      DR PROSITE: PS00291; PRION_1; 1.
CC      DR PROSITE: PS00706; PRION_2; 1.
CC      KM Prion.
CC      FT NON_TER 1 1
CC      FT NON_TER 216 216
CC      SQ SEQUENCE 216 AA; 23425 MW; BE6BCF479966730 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 216;
Best Local Similarity 100.0%; Pred. No. 3.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGKGFETDI 40
Db      135 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGKGFETDI 174
|||||
RESULT 7
PRP2_BOVIN STANDARD; PRT; 256 AA.
ID      PRP2_BOVIN
AC      001880;
DT      01-JUN-1994 (Rel. 29, Created)
DT      01-JUN-1994 (Rel. 29, Last sequence update)
DT      29-MAR-2004 (Rel. 43, Last annotation update)
DE      Major prion protein 2 precursor (PrP) (Major scrapie-associated fibril
DE      protein 2).
OS      Bos taurus (Bovine).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC      Bovinae; Bos.
OX      NCBI_TaxID=9913;
RN      [1]
RP      SEQUENCE FROM N.A.
RC      TISSUE=Brain;
RA      MEDLINE=91116243; PubMed=1362024;
RA      Yoshimoto J., Iinuma T., Ishiguro N., Horuchi M., Imamura M.,

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RA      Shinagawa M.;
RT      "Comparative sequence analysis and expression of bovine PrP gene in
RT      mouse L-929 cells."
RL      Virus Genes 6:343-356(1992).
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "fibrils".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Found in high quantity in the brain of humans and animals
CC      infected with degenerative neurological diseases such as kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
CC      between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC      the European Bioinformatics Institute. There are no restrictions on its
CC      use by non-profit institutions as long as its content is in no way
CC      modified and this statement is not removed. Usage by and for commercial
CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      EMBL: D10614; BAA01469.1; -.
CC      DR PIR: J0268; J0268.
CC      DR HSP: P10279; IDW8.
CC      DR InterPro: IPR000817; Prion.
CC      DR Pfam: PF00377; Prion.
CC      DR Pfam: PF00391; Prion octapep; 5.
CC      DR PRINTS: PR00341; PRION.
CC      DR PROSITE: PS00291; PRION_1; 1.
CC      DR PROSITE: PS00706; PRION_2; 1.
CC      KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
CC      Signal.
CC      FT SIGNAL 1 24
CC      FT CHAIN 25 233
CC      FT PROPEP 234 256
CC      FT LIPID 233 233
CC      FT CARBOHYD 184 184
CC      FT CARBOHYD 200 200
CC      FT DISULFID 182 217
CC      FT DOMAIN 54 95
CC      FT REPEAT 54 62
CC      FT REPEAT 63 70
CC      FT REPEAT 71 78
CC      FT REPEAT 79 86
CC      FT REPEAT 87 95
CC      SQ SEQUENCE 256 AA; 27880 MW; 0D969FP2D9033B30 CRC64;

Query Match 100.0%; Score 217; DB 1; Length 256;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGKGFETDI 40
Db      167 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGKGFETDI 206
|||||
RESULT 8
PRIO_BOVIN STANDARD; PRT; 264 AA.
ID      PRIO_BOVIN
AC      P10279;
DT      01-MAR-1989 (Rel. 10, Created)
DT      01-NOV-1991 (Rel. 20, Last sequence update)
DT      01-OCT-2004 (Rel. 45, Last annotation update)
DE      Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril
DE      protein 1).
GN      Name=PrNP; Synonyms=PrP;
OS      Bos taurus (Bovine).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

```

CC Bovinae; Bos.
 CC NCBI_TaxID=9913;
 RN [1]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian;
 RA MEDLINE=91116314; PubMed=1671225;
 RA Goldmann W., Hunter N., Martin T.,
 RT "Different forms of the bovine PrP gene have five or six copies of a
 RT short, G-C-rich element within the protein-coding exon."
 RL J. Gen. Virol. 72:201-204 (1991).
 RN [2]
 RN SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA MEDLINE=93118243; PubMed=1362024;
 RA Yoshimoto J., Iihama T., Ishiguro N., Horiuchi M., Imamura M.,
 RA Shingawa M.,
 RT "Comparative sequence analysis and expression of bovine PrP gene in
 RT mouse L-929 cells."
 RL Virus Genes 6:343-356 (1992).
 RN [3]
 RN SEQUENCE FROM N.A.
 RC MEDLINE=93179783; PubMed=8440932;
 RA Prusiner S.B., Furl M., Scott M., Serban D., Serban H., Taraboulos A.,
 RA Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.,
 RT "Immunologic and molecular biologic studies of prion proteins in
 RT bovine spongiform encephalopathy."
 RL J. Infect. Dis. 167:602-613 (1993).
 RN [4]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RA Horiuchi M.,
 RT Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RA MEDLINE=91422903; PubMed=11531705;
 RA Williams D., Comincini S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.,
 RT "Complete genomic sequence of the bovine prion gene (PRNP) and
 RT polymorphism in its promoter region."
 RL Anim. Genet. 32:231-232 (2001).
 RN [6]
 RN SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.,
 RT "Nucleotide sequence of PrP CNA in Korean cattle."
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RN SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.,
 RA Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RN SEQUENCE OF 25-36.
 RC MEDLINE=89057122; PubMed=2904126;
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.,
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein."
 RL Nature 336:390-392 (1988).
 RN [9]
 RN STRUCTURE BY NMR OF 132-241.
 RC MEDLINE=20359707; PubMed=10899999;
 RA Lopez Garcia F., Zahn R., Riek R., Wuthrich K.,
 RT "NMR structure of the bovine prion protein."
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339 (2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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 CC or send an email to license@ebi.ac.uk).
 CC -----
 CC EMBL; X55882; CA939368.1; -
 CC EMBL; D10612; BAA01467.1; -
 CC EMBL; D10613; BAA01468.1; -
 CC EMBL; S55629; AAB25514.1; -
 CC EMBL; AB001468; BAA19253.1; -
 CC EMBL; AJ298878; CAC37367.1; -
 CC EMBL; AF517842; AAM66709.1; -
 CC EMBL; D26151; BAA05138.1; -
 CC PIR; A54330; A54330.
 CC PDB; 1DWY; NMR; A=130-241.
 CC PDB; 1DWZ; NMR; A=130-241.
 CC PDB; 1DX0; NMR; A=23-241.
 CC PDB; 1DX1; NMR; A=23-241.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion octapep; 6.
 CC PRINTS; PR00341; PRION.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
 CC Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
 CC KW SIGNAL 1 24
 CC FT CHAIN 25 241
 CC FT PROPEP 242 264
 CC FT LIPID 241 241
 CC FT CARBOHYD 192 192
 CC FT CARBOHYD 208 208
 CC FT DISULFID 190 225
 CC FT DOMAIN 54 103
 CC FT REPEAT 54 62
 CC FT REPEAT 63 70
 CC FT REPEAT 71 78
 CC FT REPEAT 79 86
 CC FT REPEAT 87 94
 CC FT REPEAT 95 103
 CC FT VARIANT 71 78
 CC FT CONFLICT 218 218
 CC FT HELIX 136 138
 CC FT STRAND 140 141
 CC FT STRAND 155 162
 CC FT TURN 163 164
 CC FT TURN 165 167
 CC FT HELIX 173 174
 CC FT STRAND 203 203
 CC FT HELIX 184 203
 CC FT TURN 204 206
 CC FT HELIX 211 237
 CC FT HELIX 237
 CC SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
 CC Query Match 100.0%; Score 217; DB 1; Length 264;
 CC Best Local Similarity 100.0%; Pred. No. 4.2e-20;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC QY 1 RPVDYQNNQNFVHDCVNTVKEHTVTTTKGSEFTETDI 40
 CC Db 175 RPVDYQNNQNFVHDCVNTVKEHTVTTTKGSEFTETDI 214
 CC RESULT 9
 CC 06U03 PRELIMINARY; PRT; 264 AA.
 CC ID 06U03

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AC 06UL03;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367643; AA06450.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion; octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB25EFD0E CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 10
Q6UL04 PRELIMINARY; PRT; 264 AA.
ID 06UL04;
AC 06UL04;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367642; AA064649.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion; octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; F90214038316A101 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
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Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 11
Q6UL05 PRELIMINARY; PRT; 264 AA.
ID 06UL05;
AC 06UL05;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367640; AA064647.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion; octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 12
Q6UL06 PRELIMINARY; PRT; 264 AA.
ID 06UL06;
AC 06UL06;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367639; AA064646.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion; octapep; 5.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
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SQ SEQUENCE 264 AA, 28584 MW, D06747B5374541D0 CRC64;
Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
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    175 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 13
O6UT07 PRELIMINARY; PRT; 264 AA.
AC O6UT07;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
OX [1]
RN SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
RA Yang J., Zhao D., Li N.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY327450; AAQ64644.1; -
DR EMBL: AY367637; AAQ64643.1; -
DR EMBL: AY367636; AAQ64643.1; -
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR SMART: PR00341; Prion.
DR PRINTS: SM00157; Prp; 1.
DR SMART: SM00157; Prp; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion.
KW SEQUENCE 264 AA, 28614 MW, D6D214038316A231 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
    |||
    175 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 14
O6UT09 PRELIMINARY; PRT; 264 AA.
AC O6UT09;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
OX [1]
RN SEQUENCE FROM N.A.

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RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367635; AAQ64642.1; -
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; Prion.
DR SMART: SM00157; Prp; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion.
KW SEQUENCE 264 AA, 28642 MW, 1A909F038304293C CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
    |||
    175 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 15
O7YRN3 PRELIMINARY; PRT; 264 AA.
AC O7YRN3;
DT 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Prion protein precursor Prp.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=9913;
OX [1]
RN SEQUENCE FROM N.A.
RX PubMed=14722726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keefe J.W., Snelling W.M., Fox J.M., Chitko-Mckown C.G.,
RA Laegreid W.W.;
RL "Prion gene sequence variation within diverse groups of U.S. sheep,
RT beef cattle, and deer."
RL Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY335912; AAP84097.1; -
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; Prp; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Signal.
KW SIGNAL 1 24 Potential.
FT SIGNAL 1 24
SQ SEQUENCE 264 AA, 28660 MW, F28D533C47205BF5 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
    |||
    175 RPVDYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

Search completed: December 3, 2004, 00:35:33
Job time : 65.6557 secs

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Fri Dec 3 10:54:04 2004

us-10-031-975-24_copy_179_218.rup

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Perfect score: 217
Sequence: 1 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/prodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/prodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/prodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/prodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/prodata/1/iaa/PCOTUS_COMB.pep:*
6: /cgn2_6/prodata/1/iaa/bactfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	219	4	US-09-380-015B-2
2	217	100.0	263	1	US-08-242-188-3
3	217	100.0	263	1	US-08-509-261A-3
4	217	100.0	263	1	US-08-660-626-9
5	217	100.0	263	1	US-08-692-892-3
6	217	100.0	263	2	US-08-713-939A-3
7	217	100.0	263	2	US-08-868-162A-23
8	217	100.0	263	3	US-09-031-168-9
9	217	100.0	263	3	US-09-036-579-3
10	217	100.0	263	4	US-09-550-374-3
11	217	100.0	263	4	US-09-943-906-3
12	217	100.0	263	4	US-09-669-516C-9
13	217	100.0	264	3	US-09-128-450-21
14	217	100.0	264	3	US-09-823-494-21
15	217	100.0	264	4	US-09-431-887-24
16	217	100.0	264	4	US-09-627-218B-11
17	214	98.6	255	1	US-08-242-188-4
18	214	98.6	255	1	US-08-509-261A-4
19	214	98.6	255	1	US-08-660-626-10
20	214	98.6	255	1	US-08-692-892-4
21	214	98.6	255	2	US-08-713-939A-4
22	214	98.6	255	2	US-08-868-162A-24
23	214	98.6	255	3	US-09-031-168-10
24	214	98.6	255	3	US-09-036-579-4
25	214	98.6	255	3	US-09-550-374-4
26	214	98.6	255	4	US-09-943-906-4
27	214	98.6	255	4	US-09-669-516C-10

28	214	98.6	256	4	US-09-431-887-25	Sequence 25, Appl
29	214	98.6	256	4	US-09-431-887-28	Sequence 28, Appl
30	214	98.6	264	4	US-09-431-887-27	Sequence 27, Appl
31	212	97.7	245	4	US-09-431-887-5	Sequence 5, Appl
32	212	97.7	245	4	US-09-431-887-15	Sequence 15, Appl
33	212	97.7	252	4	US-09-431-887-17	Sequence 17, Appl
34	212	97.7	253	4	US-09-431-887-3	Sequence 3, Appl
35	212	97.7	253	4	US-09-431-887-7	Sequence 7, Appl
36	212	97.7	253	4	US-09-431-887-9	Sequence 9, Appl
37	212	97.7	253	4	US-09-431-887-10	Sequence 10, Appl
38	212	97.7	253	4	US-09-431-887-11	Sequence 11, Appl
39	212	97.7	253	4	US-09-431-887-12	Sequence 12, Appl
40	212	97.7	253	4	US-09-431-887-14	Sequence 14, Appl
41	212	97.7	253	4	US-09-431-887-16	Sequence 16, Appl
42	212	97.7	253	4	US-09-431-887-18	Sequence 18, Appl
43	212	97.7	254	1	US-08-242-188-1	Sequence 1, Appl
44	212	97.7	254	1	US-08-509-261A-1	Sequence 1, Appl
45	212	97.7	254	1	US-08-660-626-7	Sequence 7, Appl

ALIGNMENTS

```

RESULT 1
US-09-380-015B-2
Sequence 2, Application US/09380015B
Patent No. 6765088
GENERAL INFORMATION:
APPLICANT: Carsten Korth
TITLE OF INVENTION: Immunological Detection of Prions
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Kanton Zuerich vertreten durch die Erziehungsdirektion
STREET: Walchehor
CITY: Zuerich
STATE: Zuerich
COUNTRY: Switzerland
ZIP: CH-8090
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/09/380, 015B
APPLICATION NUMBER: US/09/380, 015B
FILING DATE: 23-Aug-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 97102837.8
FILING DATE: 21-FEB-1997
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 219 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Bos taurus
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2
Query Match 100.0%; Score 217; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 1.5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 1 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 40
Db 152 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 191
RESULT 2

```

US-08-242-188-3
Sequence 3, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BOPRP
US-08-242-188-3
Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPVDQSNQNNFVHDCVNTYKHTVTTTNGENFTETDI 40
DB 174 RPVDQSNQNNFVHDCVNTYKHTVTTTNGENFTETDI 213
RESULT 3
US-08-509-261A-3
Sequence 3, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast-Seq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-3

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNTYKHTVTTTNGENFTETDI 40
DB 174 RPVDQSNQNNFVHDCVNTYKHTVTTTNGENFTETDI 213

RESULT 4
US-08-660-626-9
Sequence 9, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Acciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 40
DB 174 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 213

RESULT 5
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 40
DB 174 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 213

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5946533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast-Seq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3

Query Match 100.0%; Score 217; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 40
DB 174 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETEDI 213

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868.162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIORITY APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 217; DB 23; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNIIVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSGNNFVHDCVNIIVKEHTVTTTGGNFETDI 213

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asclii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031.168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNIIVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSGNNFVHDCVNIIVKEHTVTTTGGNFETDI 213

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036.579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 10
US-09-550-374-3
Sequence 3, Application US/09550374
Patent No. 6372214
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/550,374
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/036,579
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-550-374-3

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 11
US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. 6562341
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 217; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 12
US-09-669-516C-9
Sequence 9, Application US/09669516C
Patent No. 6602672
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Cohen, Fred E.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: RECOMBINANT CONSTRUCT ENCODING EPIPTYPE
FILE REFERENCE: UCAL-045CON
CURRENT APPLICATION NUMBER: US/09/669,516C
CURRENT FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/031,168
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 08/660,626
PRIOR FILING DATE: 1996-06-06
PRIOR APPLICATION NUMBER: 08/521,992
PRIOR FILING DATE: 1995-08-31
PRIOR APPLICATION NUMBER: 08/509,261
PRIOR FILING DATE: 1995-07-31
PRIOR APPLICATION NUMBER: 08/242,188
PRIOR FILING DATE: 1994-05-13
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9
LENGTH: 263
TYPE: PRT

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 217; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 13
US-09-128-450-21
Sequence 21, Application US/09128450

PATENT No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 217; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 14
US-09-823-494-21
Sequence 21, Application US/09823494

PATENT No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 217; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09411887

PATENT No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 217; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

Search completed: December 3, 2004, 00:18:59
Job time : 15.1475 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Perfect score: 217
Sequence: 1 RPVDQYSNONNFVHDCVNTVKEHYVTITTKGKNFTETDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356523098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications_AA.*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
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7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
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16: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
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18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	217	100.0	117	14	US-10-050-902-349
2	217	100.0	117	14	US-10-050-902-349
3	217	100.0	117	14	US-10-050-902-349
4	217	100.0	117	14	US-10-346-190-90
5	217	100.0	117	9	US-09-745-003-9
6	217	100.0	256	13	US-10-109-551-2
7	217	100.0	256	16	US-10-479-218-3
8	217	100.0	263	9	US-09-943-906-3
9	217	100.0	263	14	US-10-435-602-3
10	217	100.0	264	9	US-09-823-494-21
11	217	100.0	264	14	US-10-209-194-2
12	217	100.0	264	14	US-10-355-780-11
13	217	100.0	264	14	US-10-304-630-24
			264	14	US-10-301-488A-30

14	217	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	217	100.0	264	14	US-10-410-907A-13	Sequence 13, Appl
16	217	100.0	264	14	US-10-346-190-80	Sequence 80, Appl
17	217	100.0	264	14	US-10-417-964A-19	Sequence 19, Appl
18	217	100.0	264	15	US-10-301-448-30	Sequence 30, Appl
19	217	100.0	264	15	US-10-301-448-30	Sequence 33, Appl
20	217	100.0	264	16	US-10-479-218-2	Sequence 2, Appl
21	217	100.0	255	9	US-09-943-906-4	Sequence 4, Appl
22	214	98.6	255	14	US-10-435-602-4	Sequence 4, Appl
23	214	98.6	256	14	US-10-109-551-4	Sequence 25, Appl
24	214	98.6	256	14	US-10-304-630-25	Sequence 28, Appl
25	214	98.6	256	14	US-10-304-630-28	Sequence 12, Appl
26	214	98.6	256	14	US-10-410-907A-12	Sequence 88, Appl
27	214	98.6	256	14	US-10-346-190-81	Sequence 1, Appl
28	214	98.6	256	16	US-10-479-218-1	Sequence 4, Appl
29	214	98.6	256	16	US-10-479-218-1	Sequence 5, Appl
30	214	98.6	256	16	US-10-479-218-4	Sequence 6, Appl
31	214	98.6	256	16	US-10-479-218-5	Sequence 7, Appl
32	214	98.6	256	16	US-10-479-218-6	Sequence 9, Appl
33	214	98.6	256	16	US-10-479-218-7	Sequence 9, Appl
34	214	98.6	256	16	US-10-479-218-8	Sequence 10, Appl
35	214	98.6	256	16	US-10-479-218-9	Sequence 11, Appl
36	214	98.6	256	16	US-10-479-218-10	Sequence 12, Appl
37	214	98.6	256	16	US-10-479-218-11	Sequence 13, Appl
38	214	98.6	256	16	US-10-479-218-12	Sequence 14, Appl
39	214	98.6	256	16	US-10-479-218-13	Sequence 18, Appl
40	214	98.6	256	16	US-10-479-218-14	Sequence 19, Appl
41	214	98.6	256	16	US-10-479-218-18	Sequence 20, Appl
42	214	98.6	256	16	US-10-479-218-19	Sequence 27, Appl
43	214	98.6	256	16	US-10-479-218-20	Sequence 32, Appl
44	214	98.6	264	14	US-10-304-630-27	
45	213	98.2	264	14	US-10-417-964A-32	

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bechmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
TITLE OR INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 217; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-20;

	Matches	40; Conservative	0; Mismatches	0; Indels	0; Gaps
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Dd	43	R P V D Q Y S N O N N F V H C N V I T Y K E H V T T T T T K G E N F T E T D I	82		

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RESULT 2
US-10-050-898-349
; Sequence 349, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tilsac, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Ploesek, Christine
; APPLICANT: Ortmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 349
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-898-349

Query Match      100.0%; SCORE 217; DB 14; Length 117;
Beet Local Similarity 100.0%; Pred. No. 1,6e-20;
Matches 40; Conservative 0; Indels 0; Gaps 0

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Db      43 RPVDQYNSNONNFVHDCVNITVKHEHTVTITTTGSEFTETDI 82
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RESULT 3
US-10-346-190-90
; Sequence 90, Application US/10346190
; Publication No. US20030219459a1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0280003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
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1 PRIOR APPLICATION NUMBER: PCT/IB02/00166
2 PRIOR FILING DATE: 2002-01-21
3 PRIOR APPLICATION NUMBER: 10/050,902
4 PRIOR FILING DATE: 2002-01-18
5 NUMBER OF SEQ ID NOS: 164
6 SOFTWARE: PatentIn version 3.1
7 SEQ. ID NO. 90
8 LENGTH: 117
9 TYPE: PRT
10 ORGANISM: Artificial Sequence
11 FEATURE:
12 OTHER INFORMATION: Modified Bovine Prion Protein Fragment
13 US-10-346-190-90
14
15 Query Match          100.0%;   Score 217,   DB 14;   Length 117;
16 Best Local Similarity 100.0%;   Pred. No. 1.6e-20;
17 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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US-09-745-003-9
; Sequence 9, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: P-P2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 161
; TYPE: PRT
; ORGANISM: bovine
US-09-745-003-9

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	Query Match	100.0%	Score 217;	DB 9;	Length 161;
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	Matches	40 / Conservative	0; Mismatches	0;	Gaps 0.
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	72 RPVDQISNNNFVHDCNIIIVKREHTYTTTCKGNFETIDI				111
D8					

RESULT 5
 US-10-109-551-2
 Sequence 2, Application US/10109551
 Publication No. US20020194635A1
 GENERAL INFORMATION:
 APPLICANT: DUNNE, PATRICK W.
 APPLICANT: PIDRAHITA, JORGE
 TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
 TITLE OF INVENTION: SPONGIFORM ENCEPHALOPATHIES
 FILE REFERENCE: TAMK:207US
 CURRENT APPLICATION NUMBER: US/10/109,551
 CURRENT FILING DATE: 2002-03-28
 PRIOR APPLICATION NUMBER: 60/280,549
 PRIOR FILING DATE: 2001-03-30
 NUMBER OF SEQ ID NOS: 10
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 2
 LENGTH: 256
 TYPE: PRT
 ORGANISM: Bos taurus
 US-10-109-551-2
 Query Match 100.0%; Score 217; DB 13; Length 256;

Best Local Similarity 100.0%; Pred. No. 4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 167 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 6

US-10-479-218-3
; Sequence 3, Application US/10479218
; Publication No. US20040171082A1
; GENERAL INFORMATION:
; APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)
; APPLICANT: Jeffrey, Martin
; TITLE OF INVENTION: Diagnostic method
; FILE REFERENCE: CG/P/135/MOD
; CURRENT APPLICATION NUMBER: US/10/479,218
; CURRENT FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: GB 0113156.4
; PRIOR FILING DATE: 2001-05-31
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patent version 3.1
; SEQ ID NO 3
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-10-479-218-3

Query Match

Best Local Similarity 100.0%; Pred. No. 4e-20; Length 256;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 167 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 7

US-09-943-906-3
; Sequence 3, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875
TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match

Best Local Similarity 100.0%; Score 217; DB 9; Length 263;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 8

US-10-435-602-3
; Sequence 3, Application US/10435602
; Publication No. US20030228303A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; TITLE OF INVENTION: Antibodies Specific for Native PrPsc
; FILE REFERENCE: UCAL059CON3
; CURRENT APPLICATION NUMBER: US/10/435,602
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: 09/943,906
; PRIOR FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: 09/550,374
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 09/036,579
; PRIOR FILING DATE: 1998-03-06
; PRIOR APPLICATION NUMBER: 08/713,939
; PRIOR FILING DATE: 1996-09-13
; PRIOR APPLICATION NUMBER: 08/528,104
; PRIOR FILING DATE: 1995-09-14
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 263
; TYPE: PRT
; ORGANISM: bovine
US-10-435-602-3

Query Match

Best Local Similarity 100.0%; Score 217; DB 14; Length 263;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 9

US-09-823-494-21
; Sequence 21, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494

Query Match
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 9

US-09-823-494-21
; Sequence 21, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494

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; ORGANISM: Bos taurus
US-10-355-780-11
Query Match      100.0%; Score 217; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 10
US-10-209-194-2
Sequence 2, Application US/10209194
Publication No. US20030051264A1
GENERAL INFORMATION:
APPLICANT: LILJEDAHN, MONIKA
APPLICANT: ASPLAND, SIMON ERIC
TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
FILE REFERENCE: BIOBANK.007A
CURRENT APPLICATION NUMBER: US/10/209,194
CURRENT FILING DATE: 2002-07-29
PRIOR APPLICATION NUMBER: 60/309,222
PRIOR FILING DATE: 2001-07-31
PRIOR APPLICATION NUMBER: 60/367,091
PRIOR FILING DATE: 2002-03-21
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-10-209-194-2

Query Match      100.0%; Score 217; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 11
US-10-355-780-11
Sequence 11, Application US/10355780
Publication No. US20030143224A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Safar, Jiri
APPLICANT: Williamson, Anthony
APPLICANT: Burton, Dennis
TITLE OF INVENTION: Antibodies Specific for Ungulate Prp
FILE REFERENCE: UCAL-194
CURRENT APPLICATION NUMBER: US/10/355,780
CURRENT FILING DATE: 2003-01-30
PRIOR APPLICATION NUMBER: US/09/627,2188
PRIOR FILING DATE: 2000-07-27
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 11
LENGTH: 264
TYPE: PRT

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; ORGANISM: Bos taurus
US-10-355-780-11
Query Match      100.0%; Score 217; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 213

RESULT 12
US-10-304-630-24
Sequence 24, Application US/10304630
Publication No. US20030161836A1
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/10/304,630
CURRENT FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-10-304-630-24

Query Match      100.0%; Score 217; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 13
US-10-301-488A-30
Sequence 30, Application US/10301488A
Publication No. US20030166558A1
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, Einar
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN, AN
TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
FILE REFERENCE: 5986/1K34AUS1
CURRENT APPLICATION NUMBER: US/10/301,488A
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PatentIn version 3.1
SEQ ID NO 30
LENGTH: 264
TYPE: PRT
ORGANISM: Cow
US-10-301-488A-30

Query Match      100.0%; Score 217; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 214

RESULT 14

US-10-301-488A-33
 ; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGURDSSON, Einar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (139)..(141)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 214

RESULT 15

US-10-410-907A-13
 ; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13

LENGTH: 264
 TYPE: PRT
 ORGANISM: Bos taurus (bovine)

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 DB 175 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGNFETEDI 214

Search completed: December 3, 2004, 01:07:48
 Job time: 47.3443 secs

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